IP Kamera 9070-CSW

User Manual

Release Date: 6/10/2010
Manual Version: 1.0
Firmware Version: 1.2.1.4

Warning: Any changes made to this equipment without permission may cause damages to the device!

IMPORTANT NOTICE

1. IP Kamera 9070-CSW was designed for indoor use, the manufacturer responsibility for possible damages caused by outdoor use, especially in the rain.
2. Please use the power adapter provided by the dealer, the manufacturer responsibility for the possible damage from using power adapters not .
3. Do not shake the IP Kamera 9070-CSW in any fashion
4. Please contact the dealer If IP Kamera 9070-CSW is not working properly.

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1.) Welcome

Introduction

The IP Kamera 9070-CSW provides reliable, high quality solution to IP Kameras. Its distinctive 720P HD quality picture, Tri-mode video capability, SD memory storage, RTSP broadcasting capability, internal microphone and many more functions makes this small device very powerful and unique. Using innovative IP technology, the built in web server of the IP Kamera 9070-CSW will allow you to view your IP Kamera from any remote locations around the world while bringing you world class surveillance and ease of mind. Furthermore, with CNT technology the 9070-CSW is easy to setup & use, simply just plug and play.

Minimum System Requirements

CPU Minimum Requirements

- Intel(R), Pentium(R), DUAL Core (D),CPU 3.0GHz or equivalent
- Operating Systems: WINDOWS Operating Systems (IE5.0+SPI)
- 512 MB system memory or above
- Video Card: 3D hardware accelerator card required – 100% DirectX 9.0c compatible
- 10/100 Ethernet switch/hub
- Sound Card: DirectX 9.0c compatible sound card
- Ethernet network port/card
- Network cable
- Internet (For remote access) or Ethernet Network (Internal Network use) with some type of Internet connection, (i.e. ADSL, Cable, Dial up or any other forms of Internet service)

Software

- VLC media player 0.8.6b or above.
- Windows XP Service Pack 2 or above.
- Resolution of screen setting: 1280x960 or higher for the display of 720P

2.) Product Overview

Features

1. Compatible with all standard 1/3" CS lens
2. Tri-Mode Camera (MPG4-1/MPEG4-2/M-Jpeg)
3. Advance Motion detection trigger AVI /Jpeg save on FTP / SD card or Email
4. 3 layers (Admin, Operator, and User) Password protected
5. Resolution from CIF 352x192 up to **HD 1280x720P**
6. Supports NTP protocol to get correct time schedule.
7. 1/2.5" Advance CMOS sensor, with highly sensibility for quick response insufficient lighting.
8. Supports HTTP CGI command set. Easy for system integration
9. IP Service Search utility, to find your IP Kamera on internet with ease
10. Watchdog / Event log design
11. Adjustable frame-rate, bit-rate, rate-control type, quality factor for best image quality and speed.
12. Supports date and time marking on the captured video, and also inserted streamed data.
13. Measured End-to-End latency is less than 150ms
14. Supports adjustable backlight, brightness, contrast, saturation & sharpness
15. TV Output capabilities
16. Automatic alarm recording buffer
17. CNT Technology – Just Plug and Play no need to port forward
18. EPTZ – Electronic Pan, Tilt, and Zoom
19. SD Memory Storage – Add convenience and storage
20. Scheduler recording capabilities
21. Email Capabilities
22. Alarm Recording Buffer
23. Supports: HTTP Web Server (HTTP), SSL, FTP client, SMTP client, NTP client, DHCP client, UPnP client, RTSP over UDP, RTP

Specification

Casing: Reinforced Aluminum
Case Color: Metallic Silver Purple
Weight: 363.7 g
Dimensions (W x L x H): 5.5cm x 16cm x 5cm
Operating Conditions: 5 – 50 °C (41 – 122 °F)
Storage Conditions: Humidity 20 – 80% RH
Power: AC Adaptor
Input: 100-240V~0.3A MAX 10-20VA, 50-60Hz
Output: +12V ! 1.0A Max 5W

Package Contents	
1.) 9070-CSW Unit x 1 (Without Lens)	
2.) CS Lens ***Lens Specifications*** 1.) Format: 1/3” 2.) EFFL: 6MM 3.) Image Space F/#: F1.2 4.) Field Angle: 58 degree 5.) Stop: Fixed 6.) Focus Extension: 20cm--∞ 7.) Mount; CS 8.) Outside dimensions: φ 30 x 31.7	
3.) 9070-CSW Installation CD	
4.) AC Adaptor	(One AC adaptor will be included and will correspond to the countries power standards) **Specs:** Input: 100-250Vac /47-63Hz, 1A Output: 12Vdc/1A Max: 12W
5.) Edimax Wireless N dongle / USB extender	
6.) 2 GBSD Card	
7.) Camera Mounting Bracket	

3.) Interface Description

Rear Panel View

Rear View

SD Card	The IP Kamera 9070-CSW comes with a 512 MB SD Card
Reset Button:	**Reset to Manufacturer Default:** Hold Reset button for 5-10 Seconds and the device will reset to manufacturer default
Video Out:	The Video out requires a BNC connector to output video to a different source.
RJ45 Ethernet:	Plug in the RJ45 Ethernet cable to the Ethernet port
DC 12 V Power Input:	Plug in the Power Adapter to the DC 12V

4.) Hardware Setup

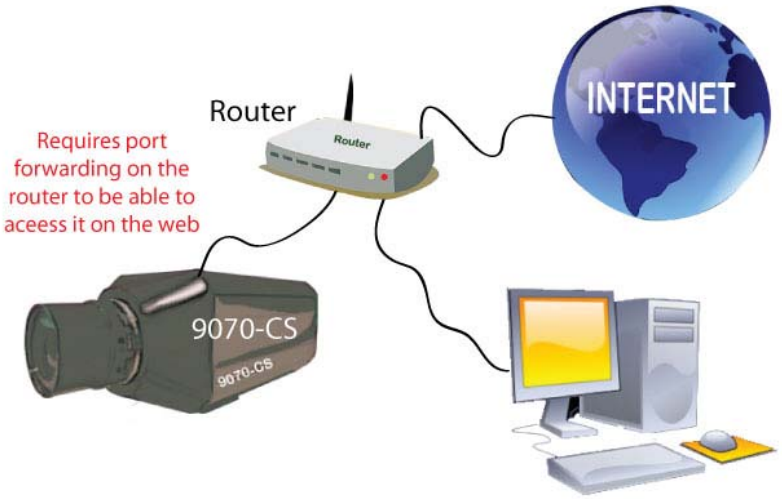
*Before setup the device make sure of the following:

1.) Make sure that all the package contents are all included
    if anything is missing please contact the store or your distributor.
2.) Make sure the power adaptor is the correct specification.
3.) Make sure that all the cables are working correctly

Internet Accessible Setup

The internet connection can be setup in two main ways so that the 9070-IR can be accessed through the internet

The network uses a Router/Firewall to connect each device to the internet



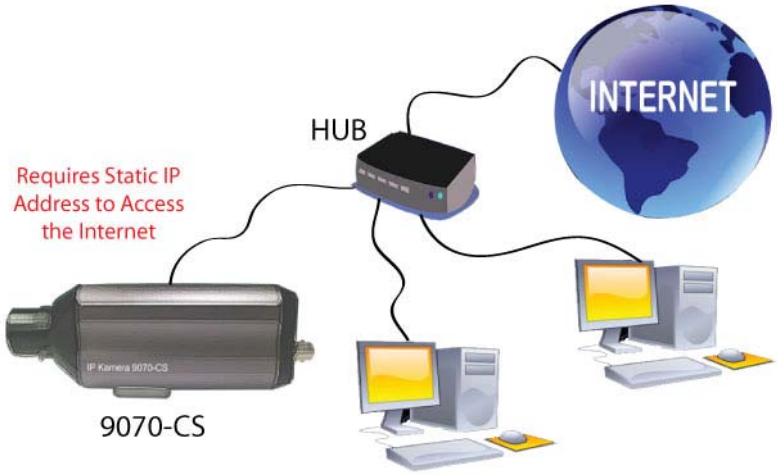
In this case, the 9070-IR will need to be port forwarded on the router so that it can accessed by the internet.

For example
9070-IR IP Address: 192.168.1.882
9070-IR Port: 9070

On the router that is being used port forwarded (port triggered) IP Address 192.168.1.882 and port 9070. For this section you may be required to refer the user manual for the router due to the fact that each router has a different way of setting up the device.

Note: *Please refer to page: 43 on how to use CNT (Cross Network Technology). With CNT no port forwarding is required to view the camera. But for normal functionality please use the web browser to view the camera.*

By using static IP Address provided by the ISP.



In this case, the 9070-IR is being connected to the internet through a hub, which is different from a router. The hub does not provide DHCP, and therefore would require that this setup have a static IP Address that is provided by the ISP.

Contact the ISP to find out the static IP address so that your device can be accessed through the internet. Once a Static IP has been assigned the device will be able to automatically go onto the internet. .

CS Lens

1.) Carefully remove the lens from the box and the IP Kamera 9070-CSW.
2.) Remove the cap from the IP Kamera 9070-CSW.
3.) Remove the back cap from the lens
4.) Then slowly screw in the lens to the IP Kamera 9070-CSW in a clockwise direction to tighten.
5.) Finally Remove the front lens cap.
6.) Loosen the lens focus screw and adjust the lens to your own liking. Turn the screw counterclockwise to loosen and clockwise to tighten the focus
7.) Adjust the lens to your own special requirements.

Connecting the Device

1.) Connect the IP Kamera 9070 to a HUB or Router with a RJ45 network cable.
2.) Connect the HUB or Router to the internet (May through ADSL/XDSL modem).
3.) Connect the power adapter to the DC 12V port of IP Kamera 9070.

SD Card

Simply place the SD card in the back of the 9070-CSW with the face of the SD card facing down.

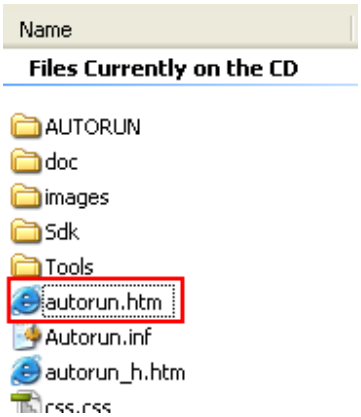
5.) Software Setup

The software for the device is located on the **Media Link-IP Family CD** that came with the device. IP Kamera Pack is located on the main page of the CD. Please follow the directions carefully and install the necessary files

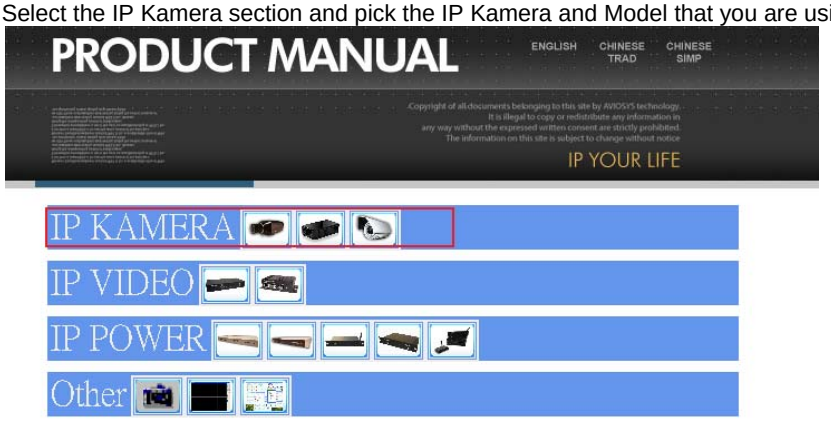
Software for IP Kamera 9070-CSW

Software for IP Kamera 9070

1.) First place the **Media Link-IP Family CD** that came with your device into your CD/DVD Rom drive. The CD should auto run but if it does not go to the CD/DVD Rom drive and select the file "**autorun.html**".



2.) Select the IP Kamera section and pick the IP Kamera and Model that you are using.



3.) Download the following software and save them to the appropriate locations.

a. **IPEdit** - Device search tool which allows you to modify IP settings, find your on the local network and IP Service.
b. **Surf 16 CH –** 16 Channel DVR, Monitoring, & Recording Software. Views up to 16 channels on one screen.

4.) Once installation is complete please double click the **IPEdit** to configure and search for your device.

Installing VLC Codec

The files that are recorded by the 9070-CSW requires this codec so that you are able to view the view. Download the latest version of the VLC codec and install it into your computer. You can find the latest version of the codec from here
http://www.videolan.org/

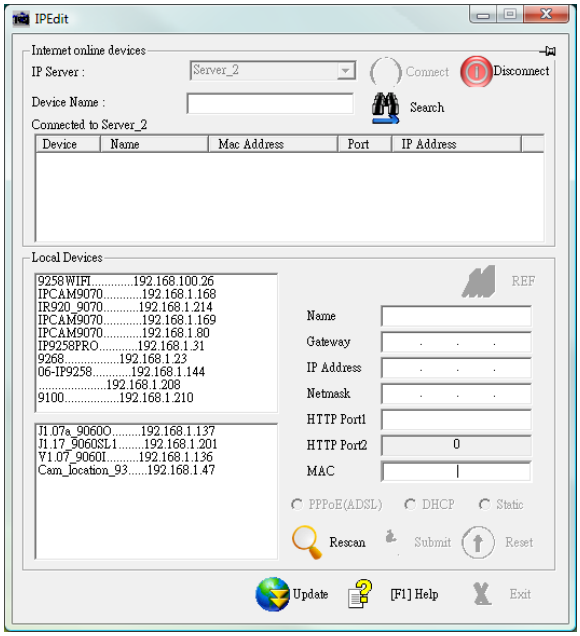
Using IP Edit

IPEdit is a search tool designed to setup and access the IP Kamera 9070-CSW.
IP Service is an additional feature which searches for the device easily without having to remember long complicated IP addresses. Instead, this technology allows the user find his or her device through the internet just by device name.

Note: Please allow the IP Kamera 9070-CSW 1 to load before using IPEdit.

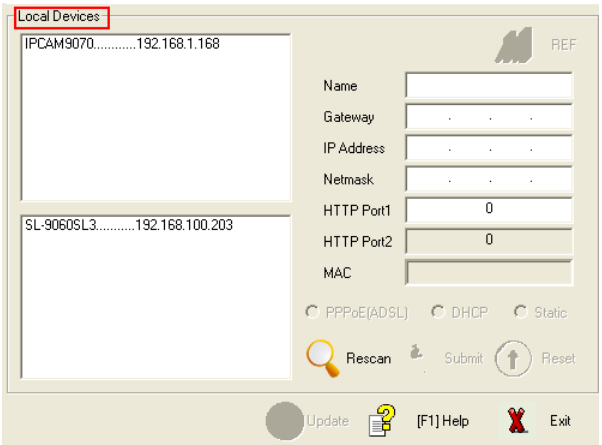
Default IP: 192.168.1.168 (When 9070 is connected to PC directly)
Default Login: Admin
Default Password: 12345678

1.) Double click on the IPEdit icon to run the program.



2.) Open IPEdit and any device in the same network should automatically be detected and listed in the **local devices sections**.

Note: If the device is not showing up, please hit the rescan button and wait about 1 minute



Setup the Device:

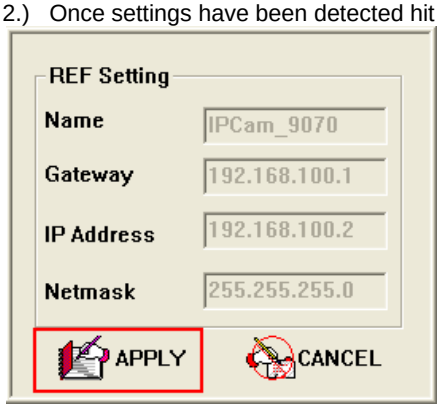
All devices will need to be on the same network if not the device cannot be accessed and will not be detected.

Quick Easy Setup (Recommended)

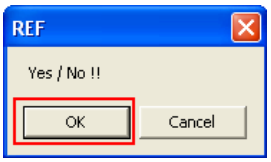
1.) Click on the REF button,

and wait a few seconds. IPEdit will automatically detect the network settings and setup the device.

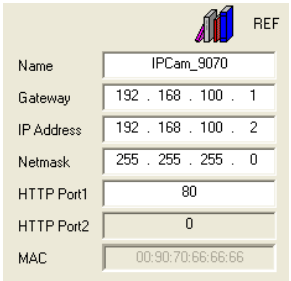
2.) Once settings have been detected hit the apply button to apply the new settings.



3.) Hit yes to confirm and Enter the login and password for the Device to Approve changes



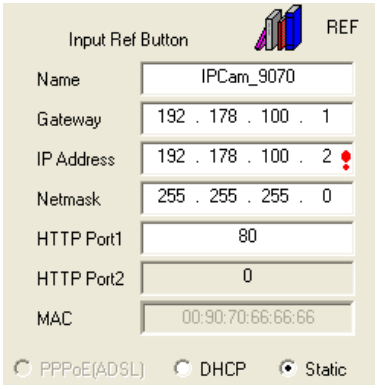
4.) Then hit the rescan button on IPEdit to confirm the changes have been made.



Custom Setup (Advance Users)

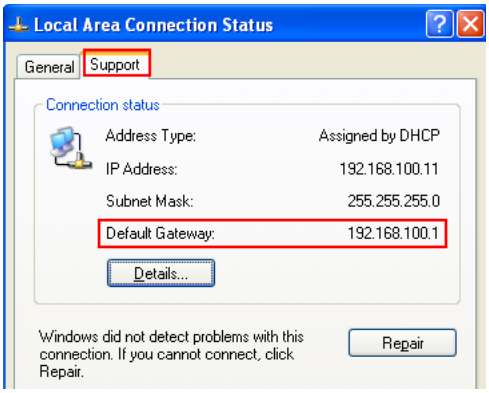
1.) Highlight the device on the local devices section and on the right side of IPEdit all network information on the device will be displayed.

If the device is not on the same network a Red Exclamation mark will appear in the IP Network information section



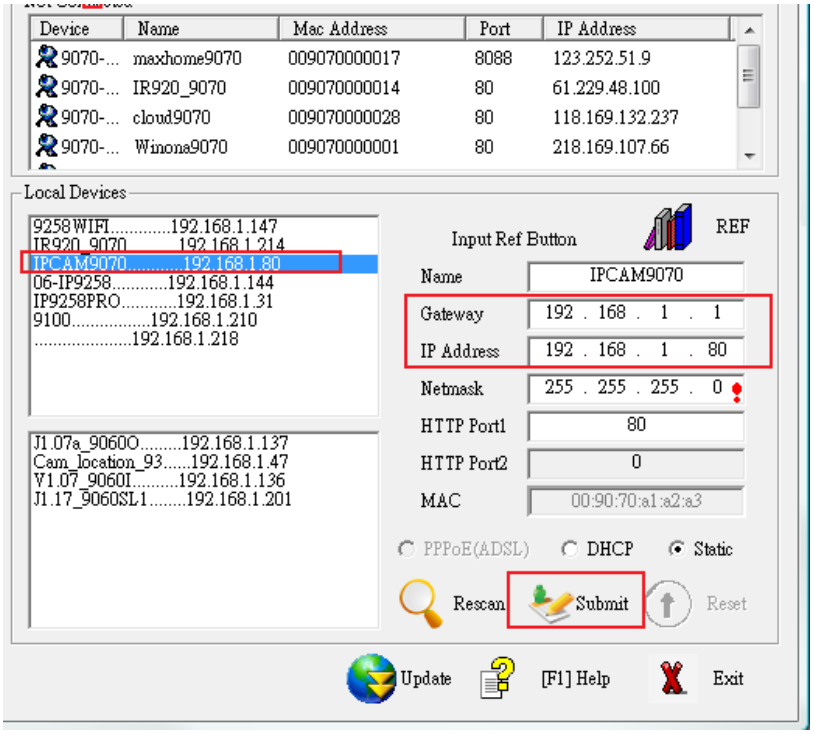
2.) To setup the device, you will need type in the correct **Gateway** and **IP Address**.

The Gateway Address: The gateway address can be obtained in Windows under the network connections page



IP Address: Make sure the first 3 sections of the IP Address matches the gateway address.
Example: Gateway Address – 192.168.1.1 IP Address – 192.168.1.xxx

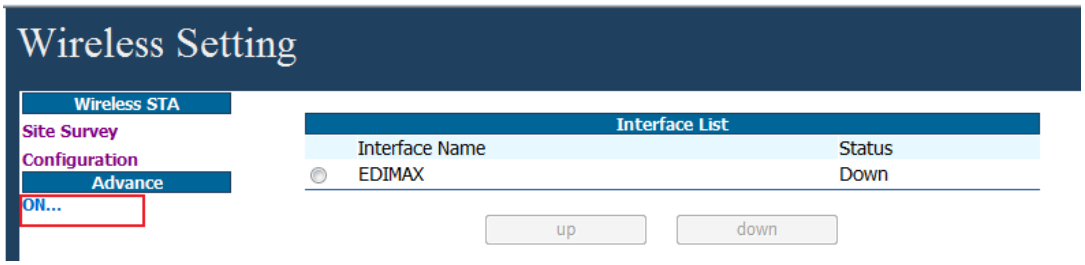
3.) Once the Default Gateway information has been obtained, enter the correct information into IPEdit and hit the submit button.



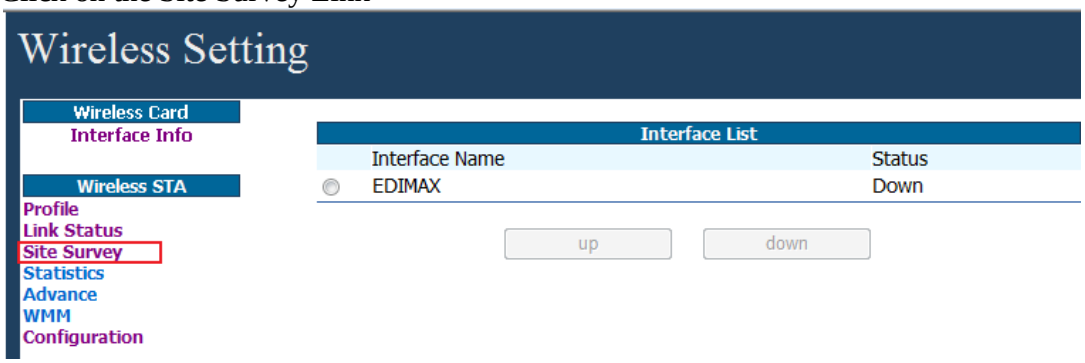
4.) Then hit the rescan button on IPEdit to confirm the changes have been made.

Setting up Wireless Settings

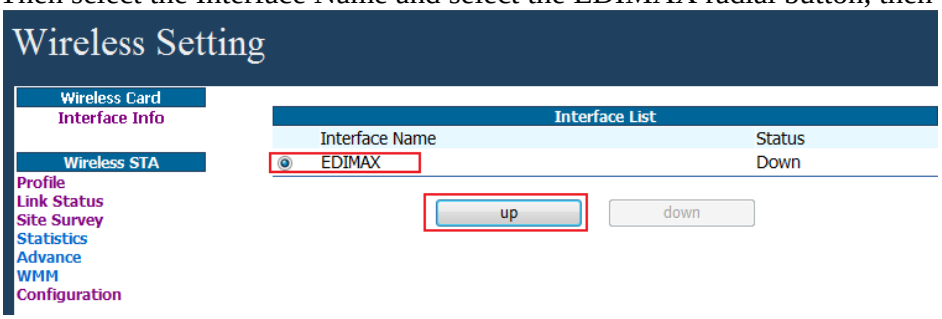
1.) Click on the On Link under advance section



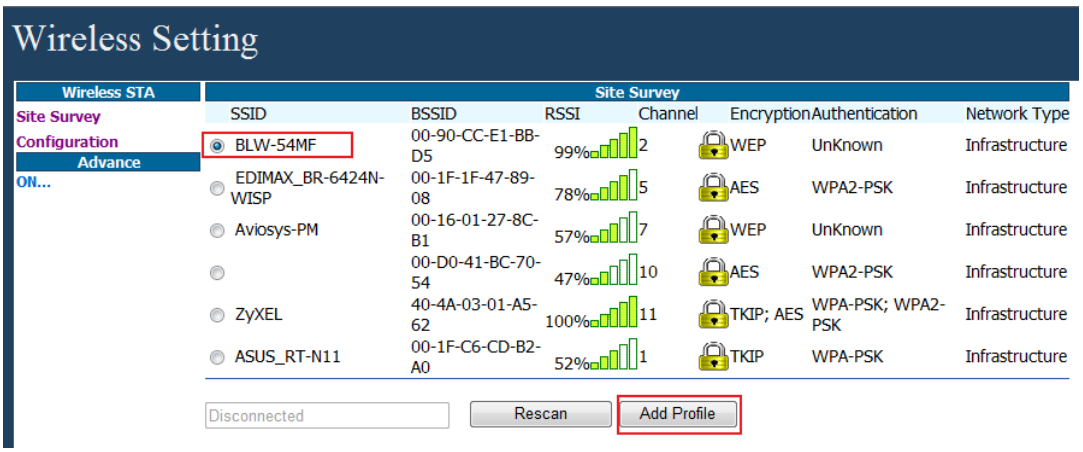
2.) Click on the Site Survey Link



3.) Then select the Interface Name and select the EDIMAX radial button, then click up.

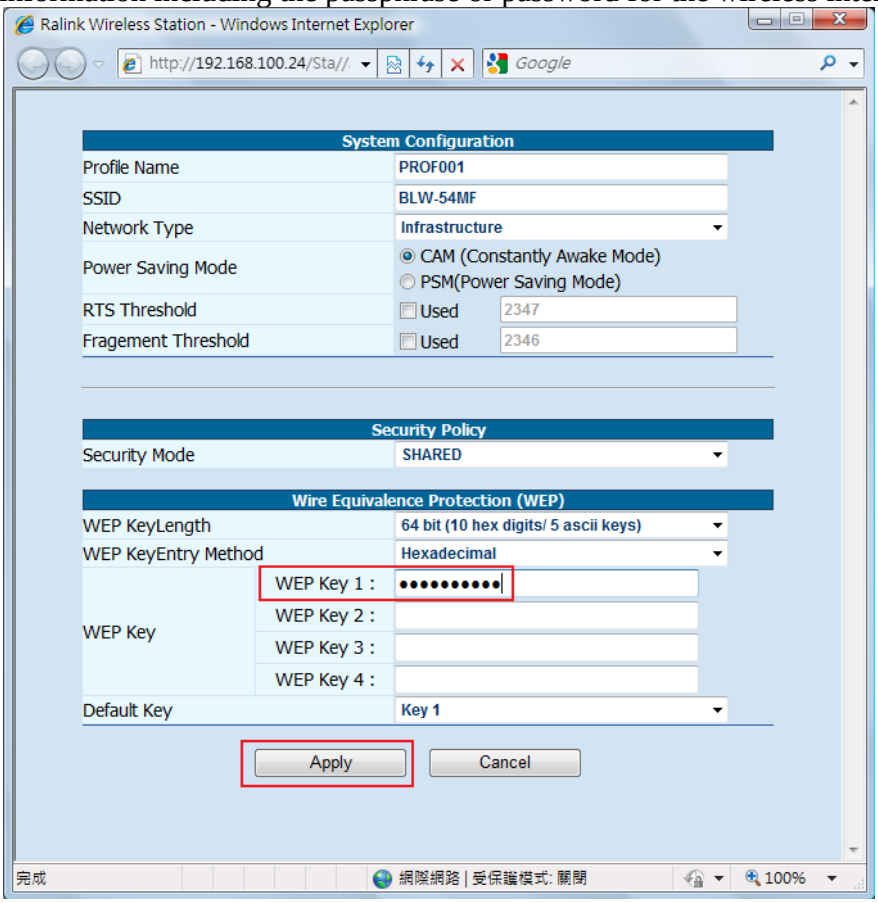


4.) Next select the wireless internet network that you would like to connect to and hit the add profile button to add a new profile



5.) A new window pop and you will be required to enter the necessary network

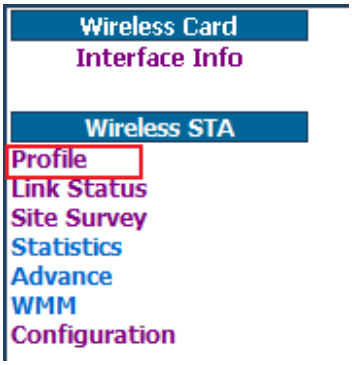
information including the passphrase or password for the wireless internet.



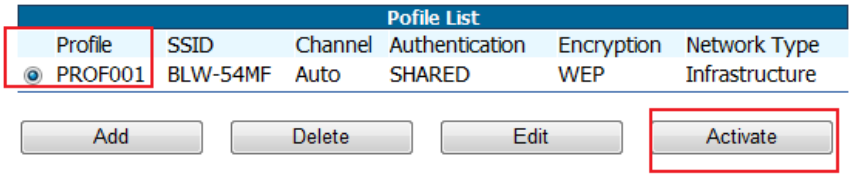
Then hit apply to save all settings.

6.) Then go back to the Main Wireless page and click on the on link under Advance for more options.

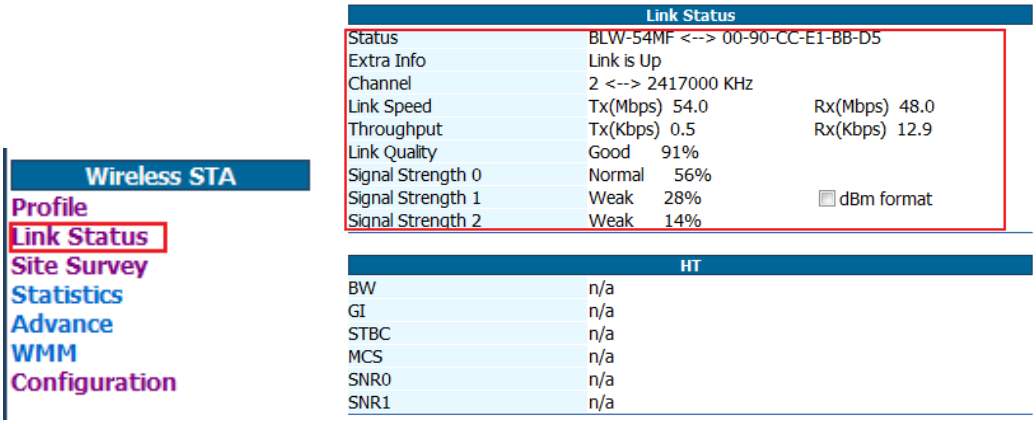
7.) Select the Profile link to see the profiles that you have added to the device.



8.) Click on your newly added profile and hit the activate button to start up the Wireless settings.



9.) Then click on Link Status to make sure that your device is connected to the wireless network.
Note: If the device is connected it will show some information in the Link Status page.

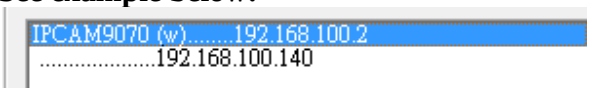


10.) Now that the device is connected to the wireless network. Unplug the Ethernet cable to the device.

11.) Then unplug the power cable to the device for about 15 seconds.

12.) Then plug in the power to the device and give the device about 1 minute to start up. Then with IP Edit search for the new wireless device. If the device is using wireless, you should see a (w) next to the name of your device.

See example below:



Note: Remember to Port forward the device with the New Wireless IP Address so that you can connect to the device from via outside the network.

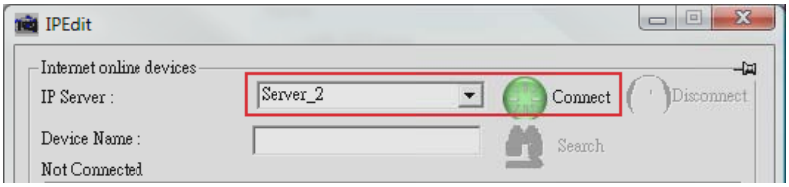
IP Service

How to use IP Service on IPEdit:

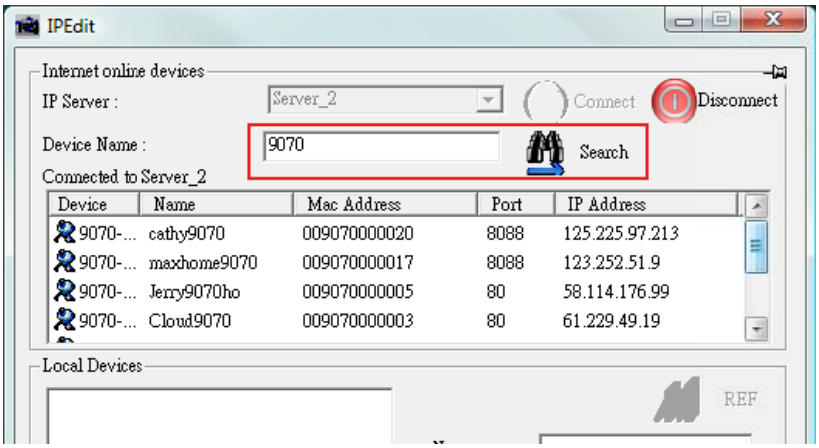
IP service allows the user to directly connect to his / her device through the internet without having to remember long confusing IP Address. Instead you only need to remember the name of the device that the you have selected. Then the user can connect to IP Service, type in the device name, and connect directly to the device.

Note: The IP Kamera 9070-CSW requires you to select Server 2 on IP Service

1.) Open IPEdit, the device will show up in the Local Device Section. If you have not selected a name for the device, please refer to the section on the manual labeled: “Naming your device”.
2.) To start IP Service, **Hit the green connect button on the top of IPEdit.**



3.) Once you have been connected search for your device by typing in at least the first 3 letters that you named your device with. Then hit the search button.



4.) Double click on your device and an Internet Explorer window will appear connecting directly to your device.

Note: It is crucial to have the IP Address of the device port forwarded from the router that you are using so you can connect to your device from anywhere. Please refer to your routers user manual on how to port forward your device.

6.) Web Interface

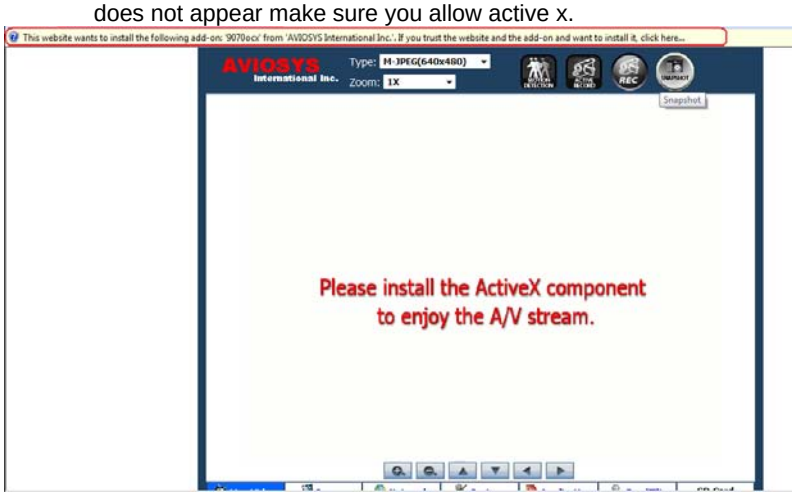
Connecting to the 9070-CSW

Once the 9070-CSW has been setup correctly and access your IP Kamera 9070-CSW.
An Internet Explorer browser screen pop up with the login screen.

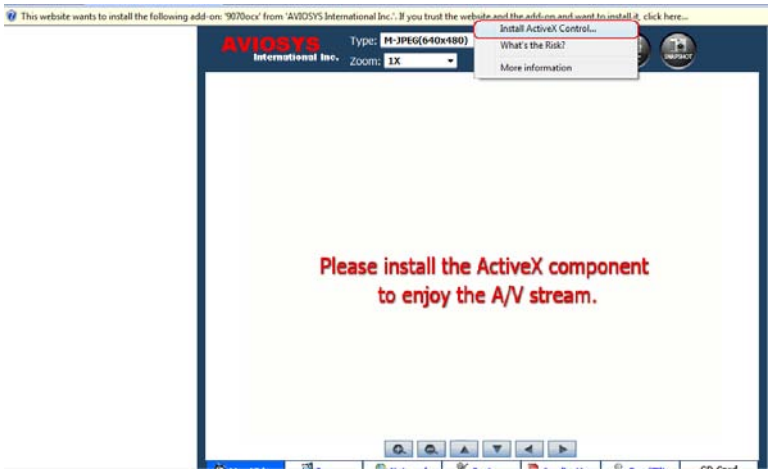
Connect to 192.168.1.168
The server 192.168.1.168 at IPCAM9070 requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
admin
Password:
Remember my password
OK
Cancel

Default IP: 192.168.1.168 (When 9070 is connected to PC directly)
Default Login: Admin
Default Password: 12345678

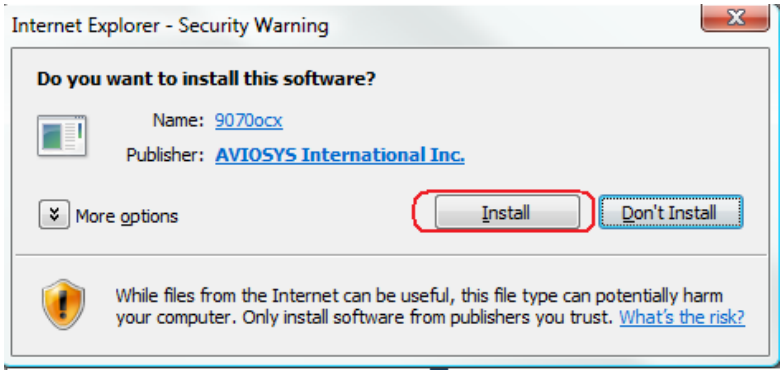
1.) After you have logged into the device you will be required to install active x controls. If this screen does not appear make sure you allow active x.



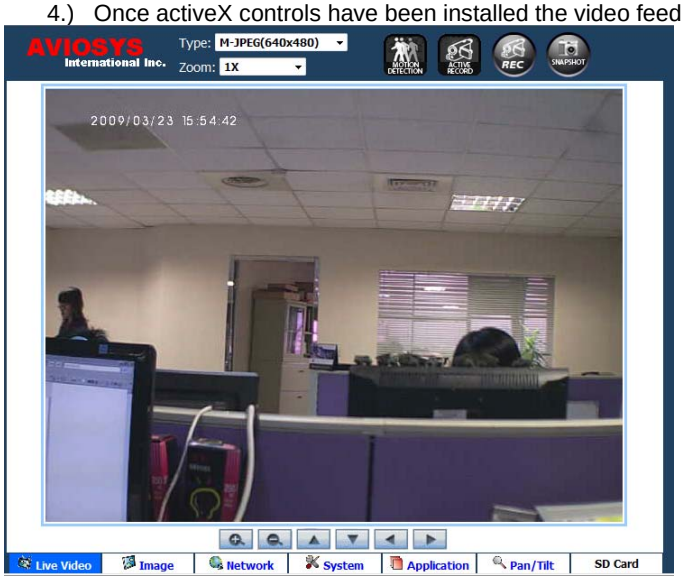
2.) Right click on yellow bar and install the activeX controls.



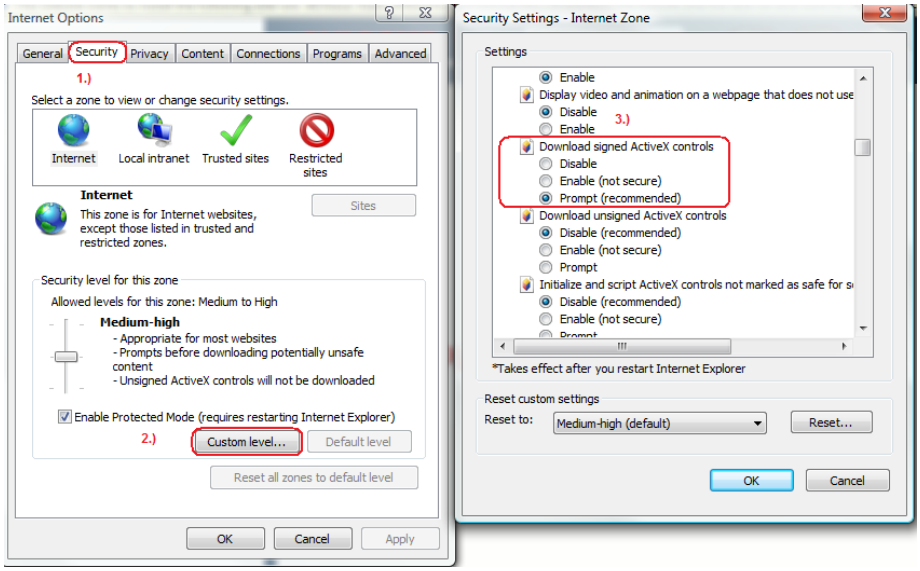
3.) Then click the install button and install the active controls.


Internet Explorer - Security Warning
Do you want to install this software?
Name: 9070ocx
Publisher: AVIOSYS International Inc.
More options
Install
Don't Install
While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?

4.) Once activeX controls have been installed the video feed will show on the screen



Note: If there is no active x controls that are showing up, please go to internet explorer and enable activeX controls.



The Control Console

The IP Kamera 9070-CSW Control Console starts in the Live Video Section of the webpage. In this section navigate to the other options and settings of the 9070-CSW

Live Video

Live Video: The Live Video section allows the user to view the camera, change resolution views,

Image

Image: The Image section allows you to edit the image settings, including recording / viewing codec, frame rate, image tuning, brightness, contrast, saturation, and etc.

Network: The network section allows you to change the devices network settings, ftp settings, smtp (email) settings, sntp settings, and IP service settings.

System: The system section allows you to change the devices date and time, set time stamp for video, users, audio settings, update, event log.

Application: The application section allows you to change the video recording format, ftp storage settings, SD Card settings,

EPTZ-Set: The EPTZ allows you to zoom into the cameras image using digital zoom with pan & tilt.

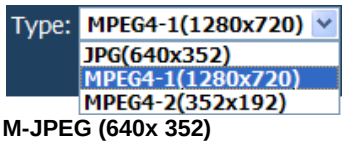
Media Player: The Media player can directly access the files in the built in memory. Each video file & picture can be accessed here and streamed through the internet.

Live Video

The Live video section of the IP Kamera 9070 is where you will live view the video of the device. From here you can change resolution, record onto current pc, take a snapshot, zoom, and detect motion detection.

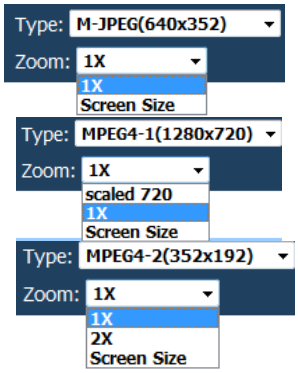
Type and Zoom

Type: The type function allows you to set the streaming format for the IP Kamera 9070. You can select from the following type of resolutions depending on the format type you have set in the image settings.



M-JPEG (640x 352)
MPEG4-1 (1280x720)
MPEG4-2 (352x192)

Zoom: The zoom function allows you to select the screen size of the stream. Depending on the type that you have selected there will be different zooms that will be available.



1X zoom: The 1X zoom is the normal view for each type.

2X zoom: This 2X zoom is 2 times the normal view for that type.

Scaled 720: Is a resolution only available in MPEG-4-1, which sets the picture at 720P.

Screen Size: Will enlarge the image to the who size of the screen. This function is very useful when trying to display on larger monitors.

Motion Detection

Motion Detection: The motion detection icon will display when motion has been detected. This setting must be activated in the application section

When no motion is detected the motion detection icons will look like the following.

But, in the case that motion is detected and recording has started, the icon will look will light up blue.

Active Record

Active Record: Active record will show up when the device is actively recording. Active recording functions like motion detection, scheduler, or an alarm will set off this automatic recording.

When active recording is not activated it will look like the picture below

When the active recording function is activated it will light up in red.

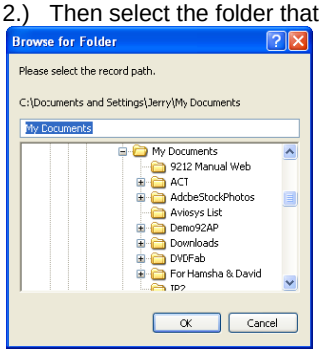
Record

Record: The record button on the 9070-CSW when pressed will record the live video feed and save the video into the computer viewing.

To record follow the following steps:

1.) Click on the record button

2.) Then select the folder that you would like to store the file. Then hit okay.



3.) Once the folder has been selected the device will start to record.

To stop recording click on the red icon and it will return to the original state.

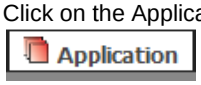
Note: Remember you need VLC codec to play the video files that are recorded

Snapshot

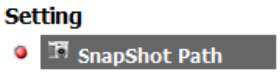
Snapshot: The snapshot function, creates a easy way take pictures of the current view in the IP Kamera 9070-CSW.

To setup the snapshot destination folder:

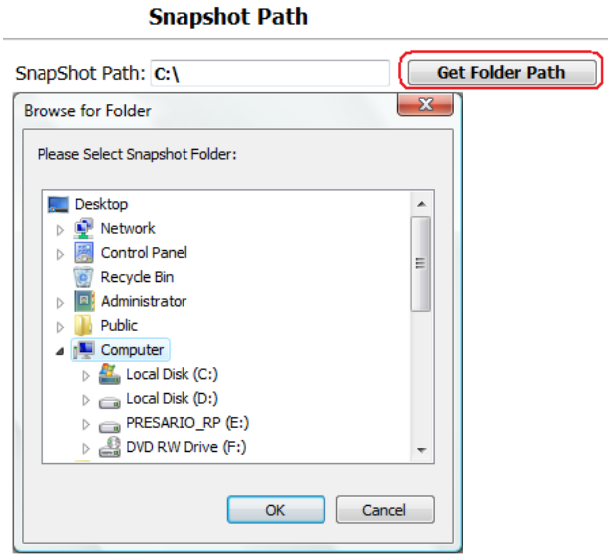
1.) Click on the Application link on the bottom menu



2.) Then select Snapshot path



3.) In here browse for the location where snapshot pictures will be stored. By default the snapshot path will be in C:/



To use the snapshot function:

1.) Click on the snapshot button

2.) In explorer go to the selected path and the files will be created there.

Audio

Audio: The audio function allows you to hear the sounds coming from the IP Kamera 9070's built in microphone.

To turn on the audio function:

1.) Click on the Audio button

2.) Then the audio button will start to move showing that sound is being transferred

3.) To turn off the audio click on the button again.

Note: Audio can only be enabled in Mpeg Mode.

Image

The image section allows you to change the Image settings for the device and tune the image of the IP Kamera 9070-CSW

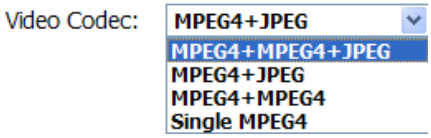
Image Settings

The Image settings section allows you to change the video settings and the Name of the Kamera.

Camera Name:

Select a camera name for the device and then hit submit

Video Codec:



Resolution:

Resolution	
(MPEG4+MPEG4+JPEG):	M4:720P,M4:CIF,JPG:352
(MPEG4+JPEG):	M4:VGA,JPEG:VGA M4:720P, JPG:720
(MPEG4+JPEG):	M4:720,JPEG:352
(MPEG4-1+MPEG4-2) **Not supported in Firefox**:	M4:720,M4:CIF
(Single MPEG4):	M4:720

Color System:

Select the broadcasting color system that pertains to your country.

NTSC/60Hz
PAL/50Hz

Each country has their TV broadcasting standard, please check with your local service provider to find out if you us a NSTC system or PAL system.

Mirror:

The mirror function allows you to flip the image of the device around. Depending the direction and the way the camera is mount you can use this setting to change the angle of the picture. Please see below for more details.

Normal View:

Normal View	***Horizontal View***	***Vertical***	***Both***

Rate Control:

Select the Bit Rate Control that fits your needs.
CVBR: Constrained Variable Bit Rate
CBR: Constant Bit Rate

Internet Speed:

The Internet Speeds settings allows you to choose some preset settings to best fit your current internet speeds. From here you can select from the following options:

Cable / ADSL: Most high speed internet users today use Cable / ADSL as the main internet provider line.
Fiber Optics: High speed fiber optics provides the best solution for outside the network because it is very fast.
Intranet (LAN): When using the IP Kamera from within the network this is the best option.
Custom: This setting allows you to manually input a setting for the Bit Rate, FPS, and picture quality.

M-JPEG Settings: The available Quality settings and FPS for the M-JPEG settings are shown below

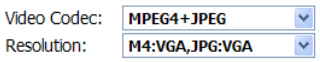
M-JPEG Quality Settings
High
Medium
Low

M-JPEG Frame Rate Settings
30 FPS
15 FPS
7.5 FPS
3 FPS
1 FPS

MPEG4-1
Bit Rate: Select a value from 64~8000.
FPS: Select a FPS from 30fps, 15fps, or 7.5fps

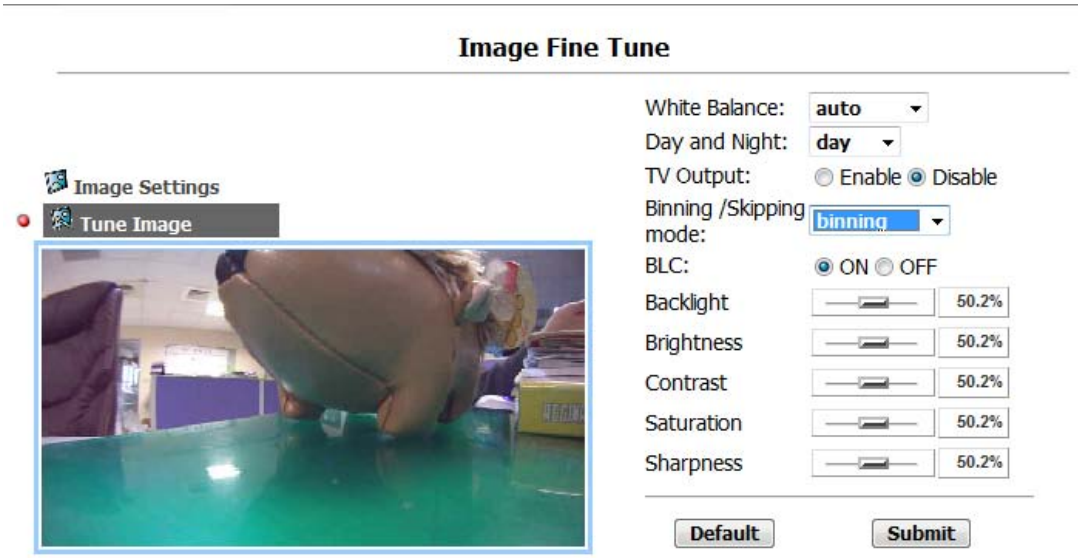
MPEG4-2
Bit Rate: Select a value from 64~8000.
FPS: Select a FPS from 15fps or 7.5fps

Note: PTZ is only available in the mode below. When you enable PTZ it will automatically jump into that mode.



Tune Image

The tune image settings section allows you to control and tune the picture quality of the image. Keep in mind, the quality of the picture will also be affected by the quality of the lens that is being used.



White Balance: Select from the following options **auto, indoor, or outdoor**
Day and Night: Select the mode Day or Night
TV Output: Select the mode **enable or disable** to output to a T.V
Binning / Skipping mode: Binning enables low light-light performance. Select Binning, Skipping, 4x Binning mode (default is Binning)
BLC (Backlight control): Select from one of the options on or off to control the
Backlight: Select a value between (0~255)
Brightness: Select a value between (0~255)
Contrast: Select a value between (0~255)
Saturation: Select a value between (0~255)
Sharpness: Select a value between (0~255)

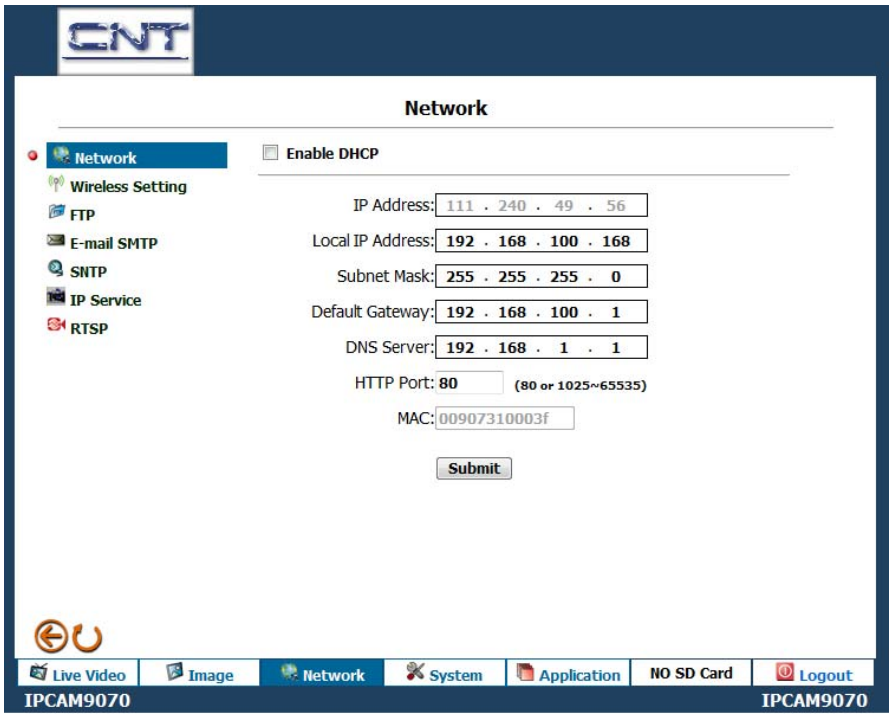
Default: To Return all values to normal default click on this button. Default (Default Values)

Note: Make sure you click on the Apply button to save any changes made Submit

Network

The Network settings section allows the user to setup their network information for the IP Kamera.

Network



The network section allows you to setup the network information for the IP Kamera 9070.

Enable DHCP: This function will enable the DHCP for the device. If this is enabled the IP Address of the device will be automatically provided by the router of the device.

IP Address: Actual IP Address of the device can be found here

LAN IP Address: Local Area Network Address.

Subnet Mask: Subnet Mask information

Default Gateway: Default Gateway Address

DNS Server: Domain Name System Address

Http Port: Enter the port that you would like

MAC: The Mac Address or physical address of the device

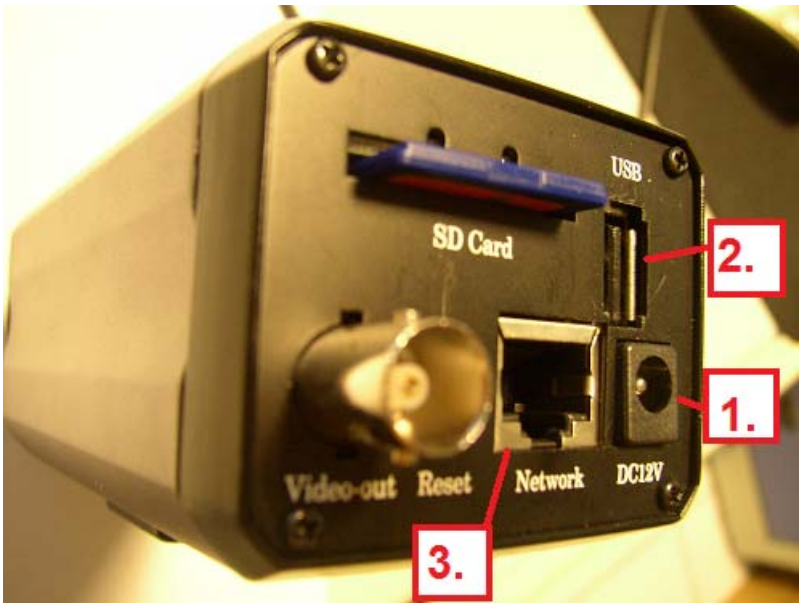
Note: Make sure you click on the Apply button to save any changes made

Wireless Settings

Quick setup for Wireless Networks

1.) Unplug the device including the following
   - Power Cable
   - RJ45 Ethernet Cable
   - Edimax USB dongle if connected

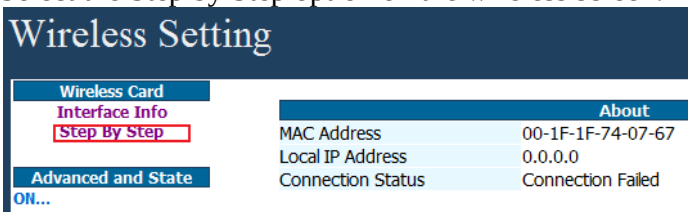
2.) First plug in the power to the device, second plug in the USB dongle, Lastly plug in the network cable



3.) Then Open IP edit and Login to the 9070 IP Kamera.

4.) Next go to the network settings on the bottom and select Wireless. A new window should pop up with the wireless settings .

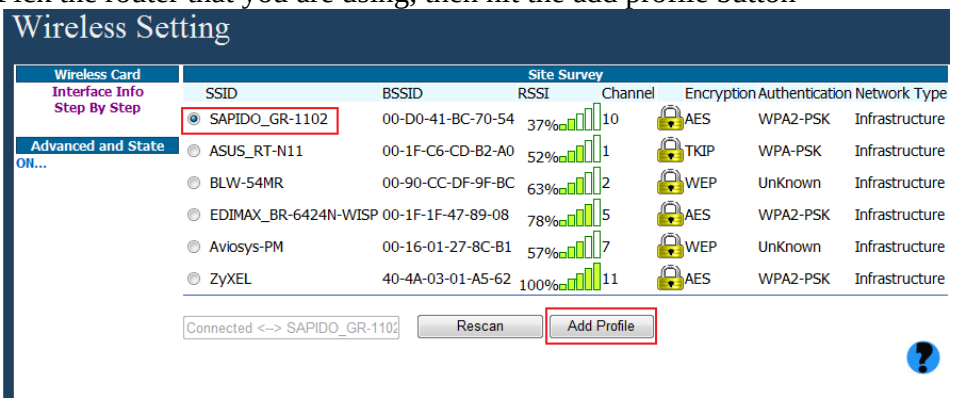
5.) Select the Step by Step option on the wireless screen.



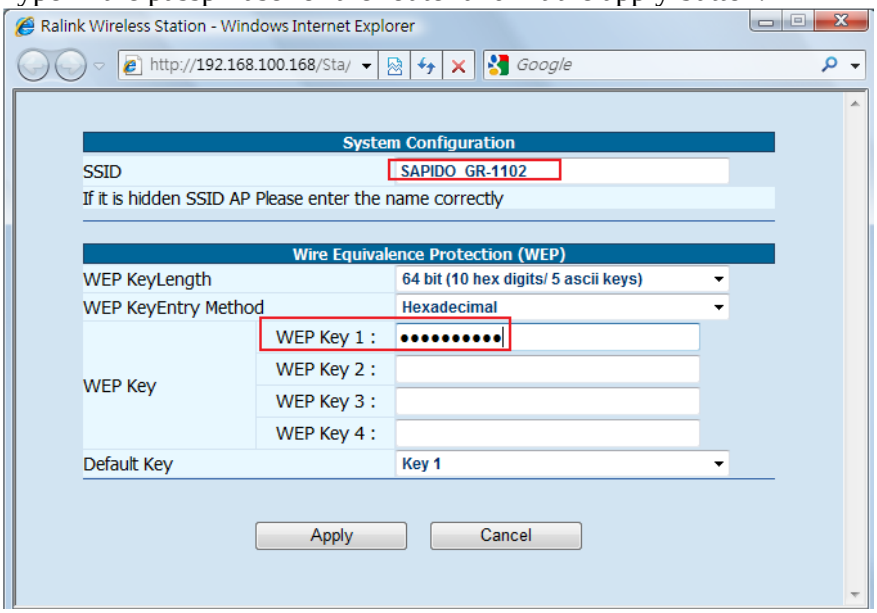
6.) Click on the for more information on how to setup the device.

Step 1
Step1:Select Your AP Router
Step2:Click Add Profile Button
Step3:Set Your Connection Settings (Username And Password, etc.)
Step4:Click Apply Button

7.) Pick the router that you are using, then hit the add profile button


Wireless Setting
Wireless Card
Interface Info
Step By Step
Advanced and State
ON...
Site Survey
SSID BSSID RSSI Channel Encryption Authentication Network Type
SAPIDO_GR-1102 00-D0-41-BC-70-54 37% 10 AES WPA2-PSK Infrastructure
ASUS_RT-N11 00-1F-C6-CD-B2-A0 52% 1 TKIP WPA-PSK Infrastructure
BLW-54MR 00-90-CC-DF-9F-BC 63% 2 WEP UnKnown Infrastructure
EDIMAX_BR-6424N-WISP 00-1F-1F-47-89-08 78% 5 AES WPA2-PSK Infrastructure
Aviosys-PM 00-16-01-27-8C-B1 57% 7 WEP UnKnown Infrastructure
ZyXEL 40-4A-03-01-A5-62 100% 11 AES WPA2-PSK Infrastructure
Connected <--> SAPIDO_GR-1102
Rescan
Add Profile

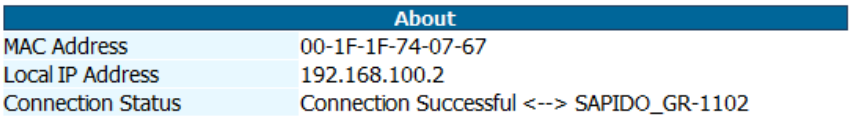
8.) Type in the passphrase for the router and hit the apply button.



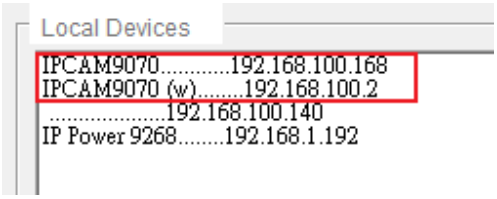
9.) Wait about 60 seconds for device to connect.

Connecting.....About 60 seconds....

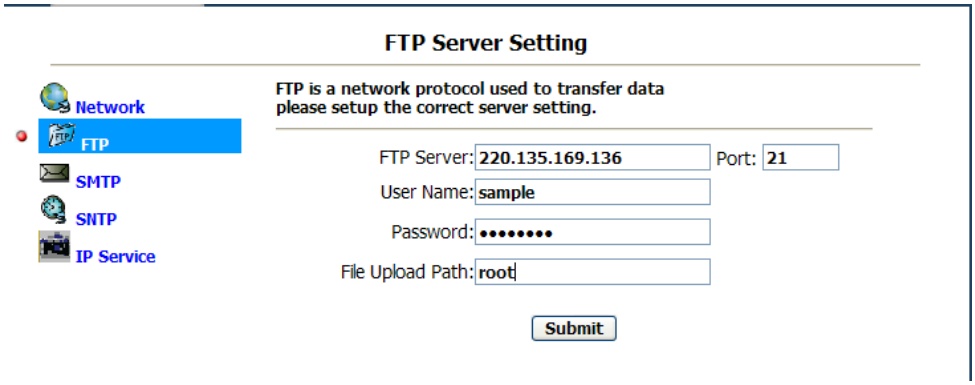
10.) Then check to see for the connection successful under the connection status and the device is good to go.



11.) Unplug the RJ45 cable of the device and search on IPEdit for the new wireless settings. You will see a (W) next to your device in IPEdit which means wireless is activated. If the RJ45 cable is not disconnect you will see two IP Address on the device.



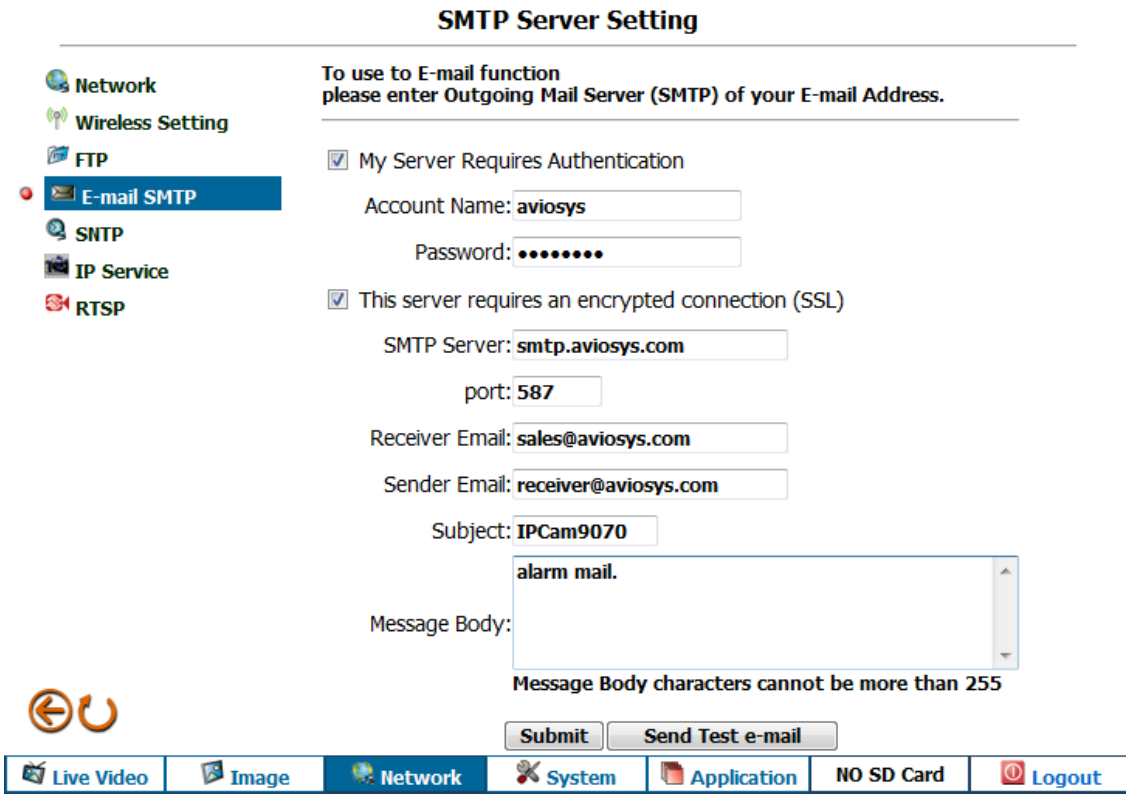
FTP



The FTP section of the IP Kamera 9070 allows you to save video clips

FTP Server: Enter the FTP server address here
User Name: Enter the FTP Username
Password: Enter the FTP Password
File Upload Path: Enter the upload path of the FTP Server

SMTP (Outgoing E-mail Server)



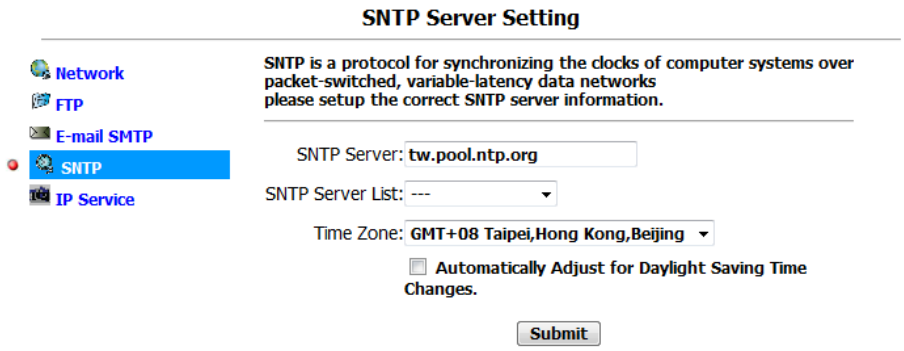
Enter the SMTP E-mail server information here.

My Server Requires Authentication: Some servers require SMTP Authentication for security purposes. If your email server requires this option, make sure to have this section checked.
Account Name: Enter then login of the mail account
Password: Enter the password of the E-mail account
Use SSL Connect: If the email server requires SSL (Secure Sockets Layer) this option need
Sender Email: Enter the Sender Email Address
SMTP Server: Enter the SMTP Outgoing mail address
Email Address: Enter the Receiving Email address
Submit: After all settings have been made. Hit the submit button to save all changes.
Send Test E-Mail: This button will send a test e-mail to the designated account. This way, you can check to make sure that the settings are correct.

Note: If you are having problems sending emails out and the settings are correct. Please check your DNS Server address to make sure you can send email out.

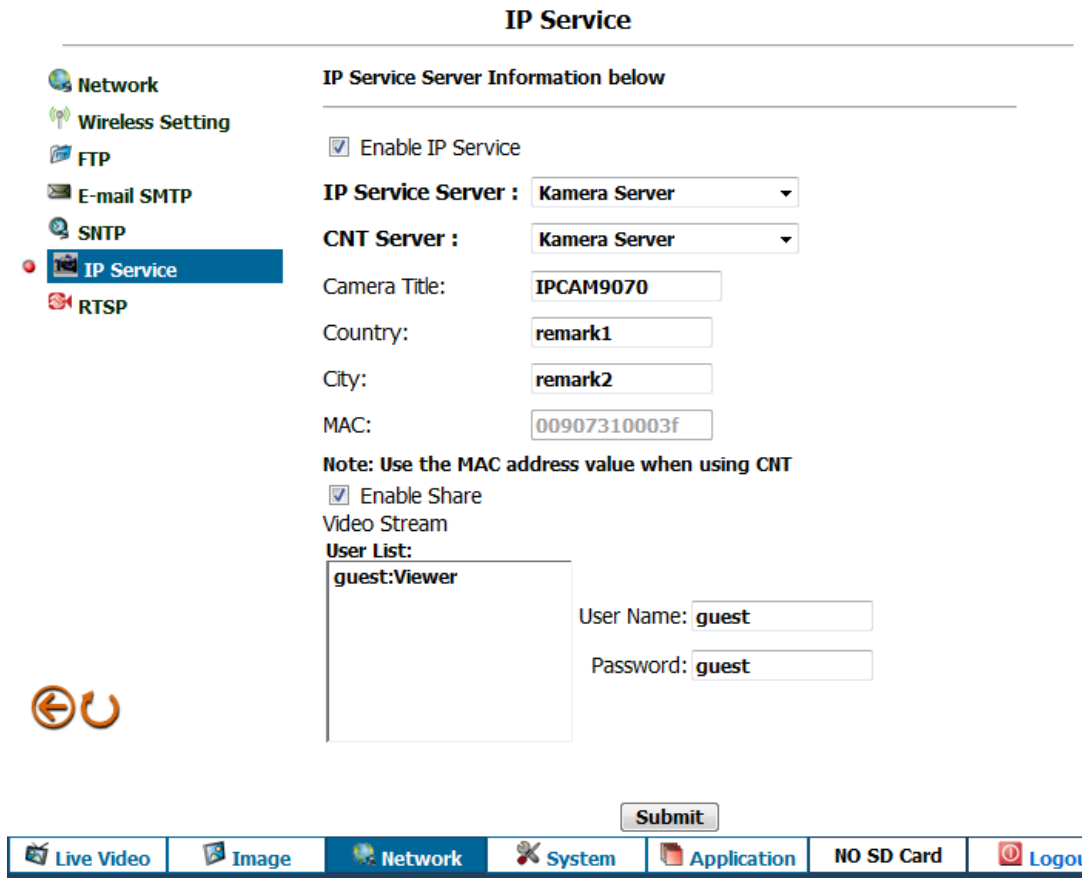
SNTP

The SNTP is a protocol for synchronizing the clocks of computer systems.


SNTP Server Setting
Network
FTP
E-mail SMTP
SNTP
IP Service
SNTP is a protocol for synchronizing the clocks of computer systems over packet-switched, variable-latency data networks
please setup the correct SNTP server information.
SNTP Server: tw.pool.ntp.org
SNTP Server List: ---
Time Zone: GMT+08 Taipei,Hong Kong,Beijing
Automatically Adjust for Daylight Saving Time Changes.
Submit

SNTP Server: Enter the SNTP server address. Below are a list of free public NTP servers.
Europe — europe.pool.ntp.org
Asia — asia.pool.ntp.org
Oceania — oceania.pool.ntp.org
North America — north-america.pool.ntp.org
South America — south-america.pool.ntp.org
Africa — africa.pool.ntp.org
Time Zone: Enter the corresponding time zone
Automatically adjust for daylight saving time: Check this section if you want daylight saving time to be implemented automatically.

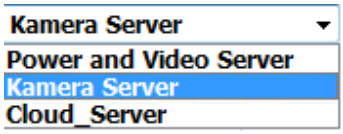
IP Service



IP service allows you to connect to the device directly without having to remember a long IP Address. Just enter the name of your device into IP Service and you can find your device as long as the port forwarding has been setup.
This section allows you to turn of this service.

By default IP service is On. Uncheck the enable button to close this feature.

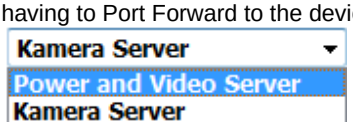
IP Service Server:
There are 3 IP Service Servers that can be selected from:



Power and Video Server: This is the server where most IP Power products and IP Video server products can be found.

Kamera Server: This is the IP server where most IP Kamera products from Aviosys will be found on.

CNT Server: Cross Network Technology Sever. CNT allows user to connect to their IP Kamera without having to Port Forward to the device.



Camera Title: This is the name of the device.

Country: The country where the device is located.
City: The city where the device is located.
MAC: Physical address or MAC of the device.

Enable Share: Check this feature to enable video sharing on guest accounts only. Make sure that the guest account has already been created in the user section. Once this section has been made you can come here to verify that
Note: This function is for IP Surf Pop software.
Please refer to the IP Surf Pop manual for more information at www.Aviosys.com

RTSP

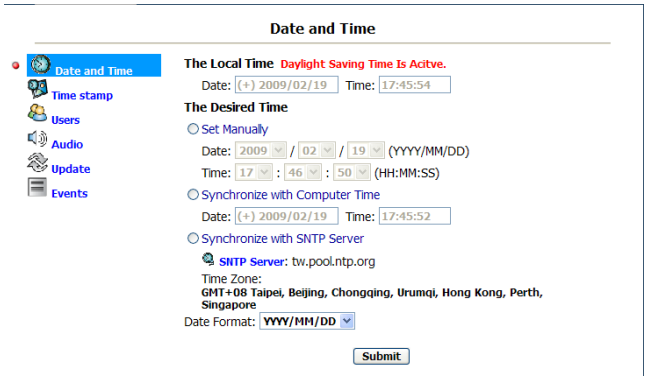
Real Time Streaming Protocol (RTSP) gives the device another way to stream live video. Using programs that support RTSP, you can broadcast the videos from the 9070 live.

Note: To access the device from outside the network. Please make sure of the following:

9070 should be set to DMZ host,

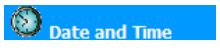
or mapping router's TCP ports 554 and 8554 to 9070, preferably at the same time mapping UDP port 6970-9999

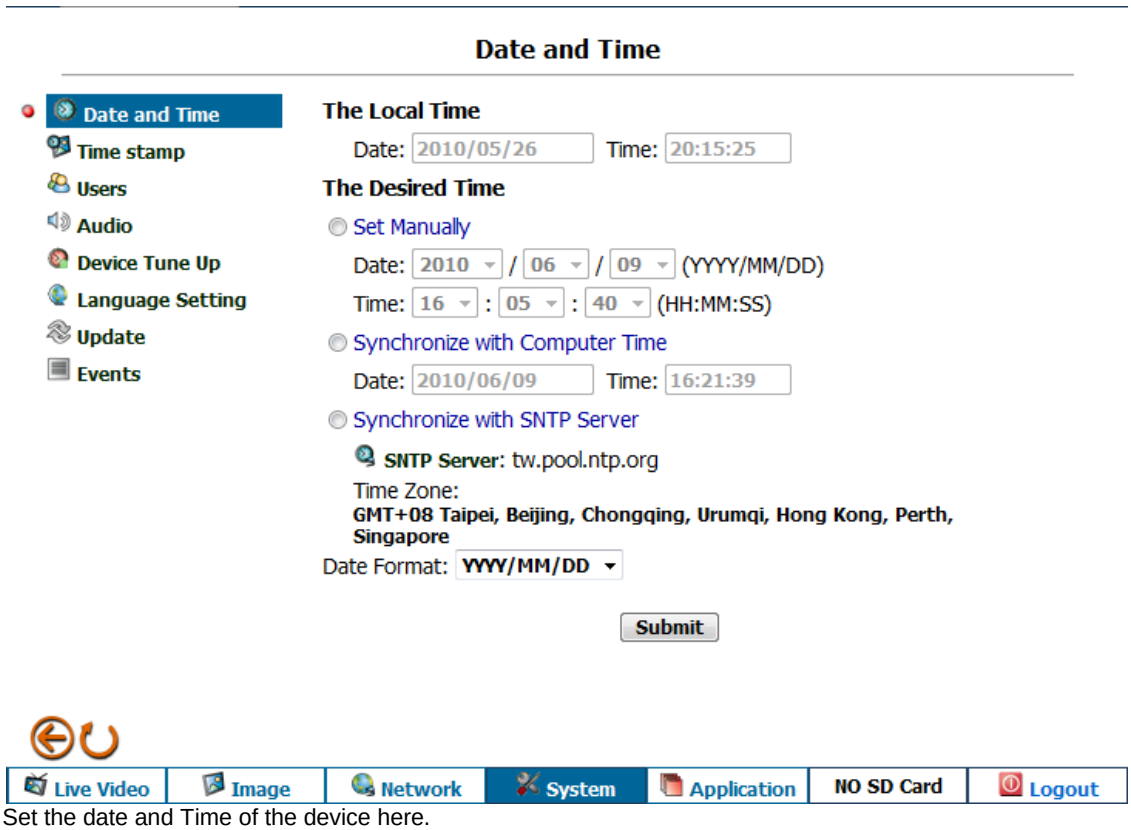
System



The system section allows you to setup the IP 9070's system configurations. This includes the following

Date and Time





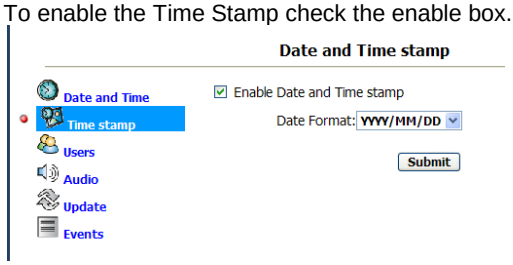
Set the date and Time of the device here.
The Local Time: The local time corresponds to the current time of the IP Kamera 9070.
Time Setup: Setup the current time of the device here

1.) **Set Manually**: Set the time manually
2.) **Synchronize with Computer Time:** Synchronize the time with the current computers time
3.) **Synchronize with SNTP:** Synchronize with SNTP

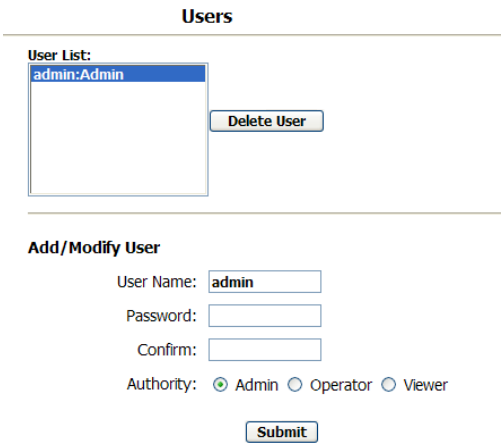
Time Stamp

The time stamp adds a time to the live video. When a recording is made this time stamp will show up with in the video file as well.

To enable the Time Stamp check the enable box.



User



The user setting allows you to create and remove users for access to the IP Kamera 9070.
Authority: Select one of the following options:

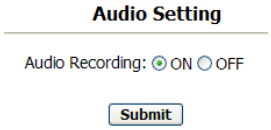
Admin: You can operate all functions in Web interface. Also, you can add or delete any user's account.

Operator: You can operate all functions in Web interface except user Add/Delete.

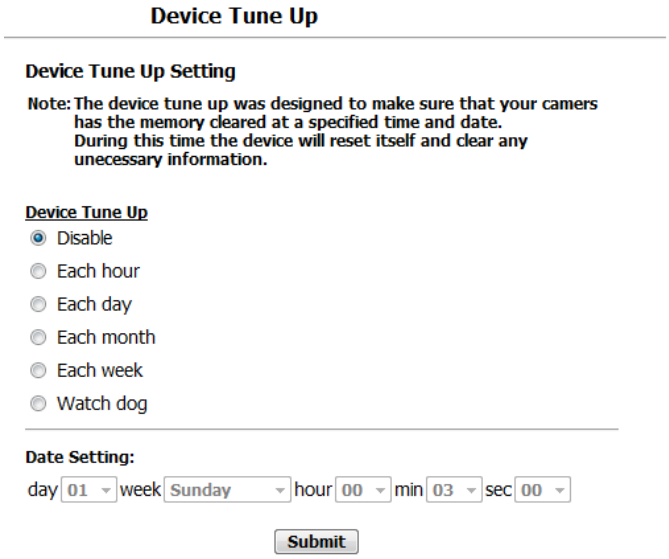
Viewer: You can only monitor the Web interface, but cannot operate all function and set parameters.

Audio

To enable audio recording, please select the enable button.

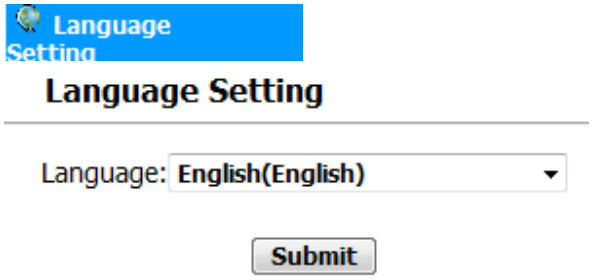


Device Tune Up


Device Tune Up
Device Tune Up Setting
Note: The device tune up was designed to make sure that your camers has the memory cleared at a specified time and date. During this time the device will reset itself and clear any unecessary information.
Device Tune Up
Disable
Each hour
Each day
Each month
Each week
Watch dog
Date Setting:
day 01 week Sunday hour 00 min 03 sec 00
Submit

The device tune up resets the 9070 to make sure that the device is running smoothly. This resets the internal memory of the device by restarting the 9070. You can set the Device tune up to reset each hour, day Month, or Week

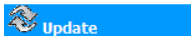
Language Setting

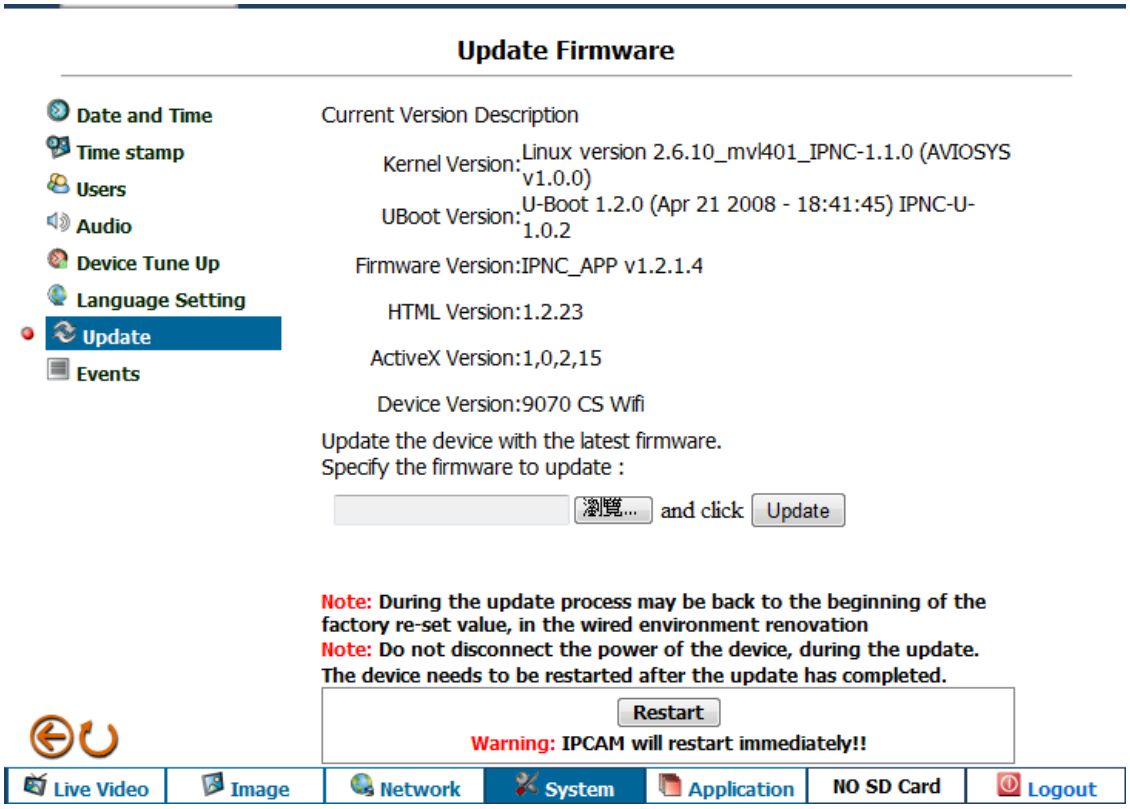


The language setting section is where you can select the language that you would like to use to use the 9070. Currently there are 3 languages available: English, Chinese (Traditional), Chinese (Simplified).

The 9070 will automatically detect the favored language of choice depending the settings used in Windows.

Update





V

The Update Firmware section is where information on the 9070 is displayed.

The **Kernel Version**, **Uboot Version**, **Firmware Version**, and other technical information on the device is displayed here.

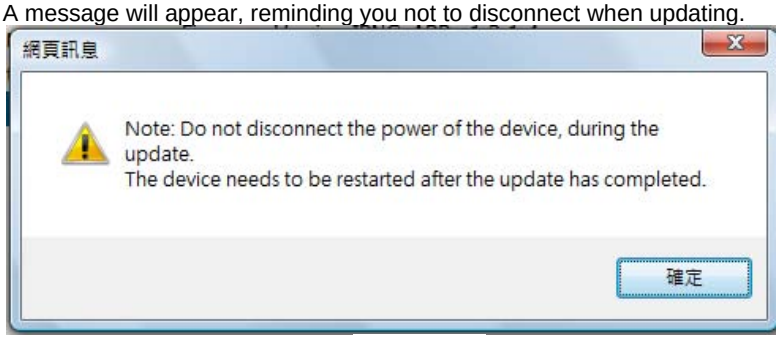
Updating the Device

To update the device go to the update section. Here you will find the Current Version description.
To update the device:

1.) Browse for the correct update file.

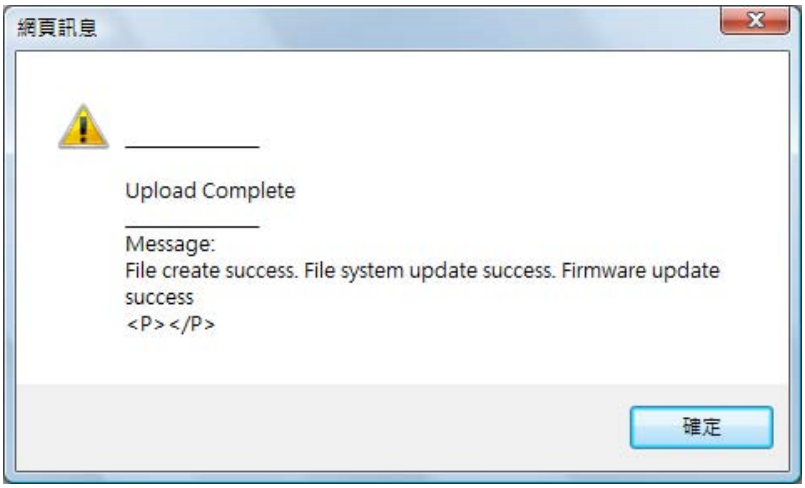
2.) Hit the update button.

3.) A message will appear, reminding you not to disconnect when updating.


網頁訊息
Note: Do not disconnect the power of the device, during the update.
The device needs to be restarted after the update has completed.
確定

4.) Please wait for the loading circle to finish, and wait for an update confirmation page.

5.) Once the device is updated you will see a update confirmation and click okay.

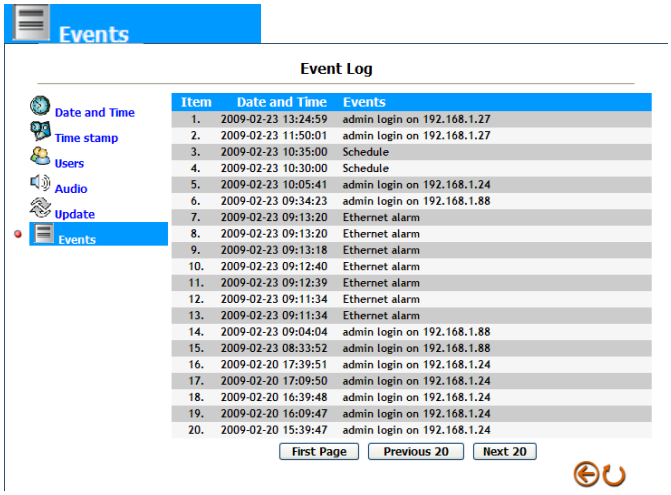


Warning: Before you go to the next step make sure you have all your setting information written down. The device will reset back to manufacturers default values after you restart the device. You will need reconfigure the IP Kamera 9070, including Email, FTP, IP Address, Gateway, and etc.

6.) Unplug the device then plug it back in.

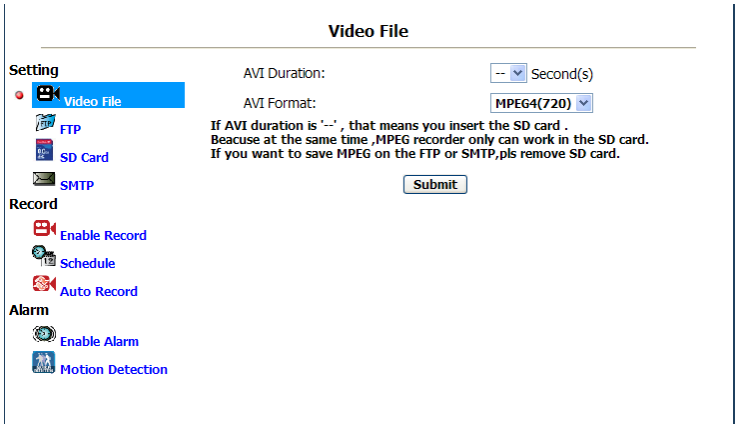
7.) Then make sure you re-setup the device.

Events



The events section will log all the events that are happening to the IP Kamera.

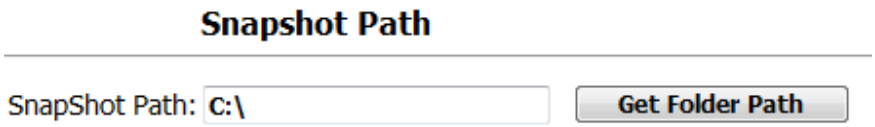
Application



The Application Section allows you to setup the Video File information, FTP, SD Card, SMTP

Setting

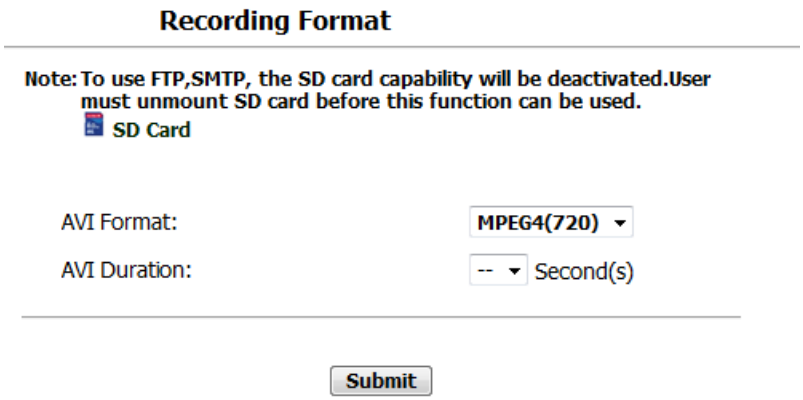
Snapshot Path



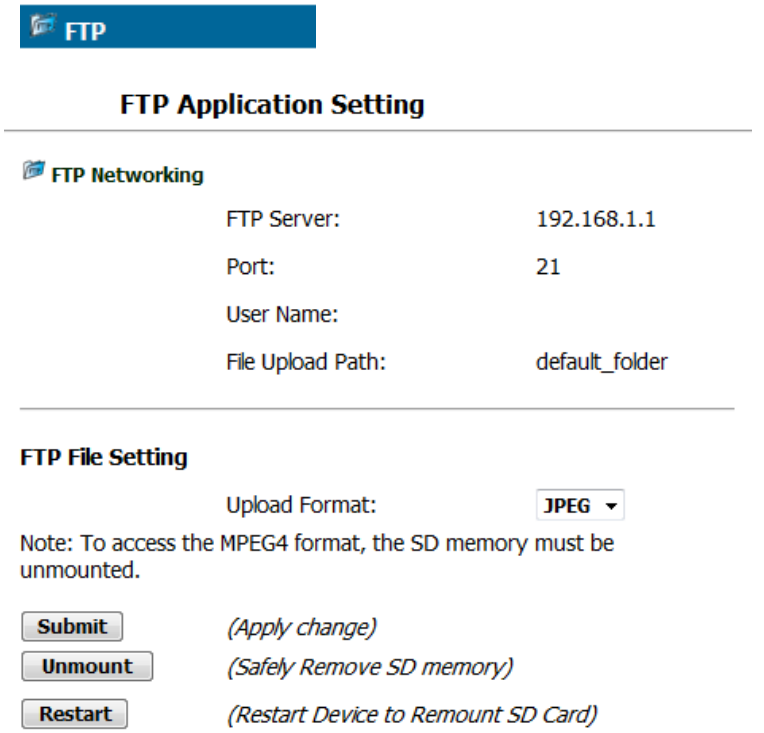
The Snapshot path is the location where the snapshot pictures will be saved onto your computer. The default snapshot path will be set to C:\. To select the snapshot path click on the

button and select the folder where the snapshots will be saved.

Recording Format


Recording Format
Note: To use FTP,SMTP, the SD card capability will be deactivated.User must unmount SD card before this function can be used.
SD Card
AVI Format:
MPEG4(720)
AVI Duration:
-- Second(s)
Submit

FTP



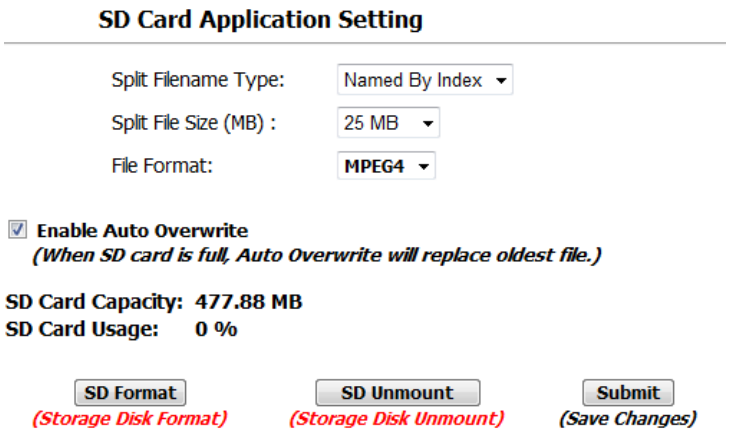
The FTP section allows you to view your current FTP settings. From here you may have to unmount the SD memory so that you can record in MPEG4 format.

Note:

1.) Before you use the FTP function, you will need to set the FTP server information. You can click on the FTP Networking link to take you to the FTP setup section.

2.) If the SD Card is inserted into the device, the 9070 will only be able to record in M-Jpeg mode to the FTP.

SD Card



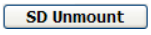
File Format: Select the video format that you would like to save into the SD card

Split Filename Type: Select the format that you would like to save the files in the SD card. You can pick from:
Name by Index: Creates file names according to index.
Name by Time: Creates file names according to time.

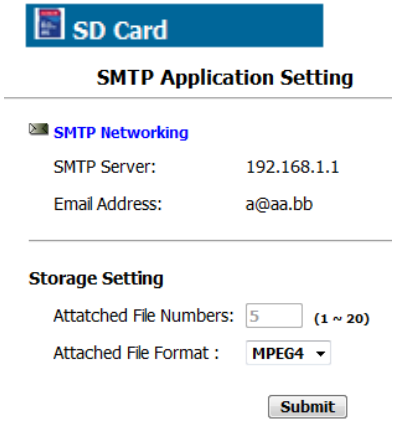
Split File Size: Select the size of each file that will be saved into the SD.
You can select from:
None, 10mb, 25mb, 50mb, & 100mb.

Enable Auto Overwrite: Auto Overwrite allows the device to automatically replace the oldest file on the SD card when it is full.

SD Format: SD format will format the entire SD card

SD Unmount: Click the SD unmount button when the SD card is being removed this will safely remove the card without any damages. 

E-mail SMTP

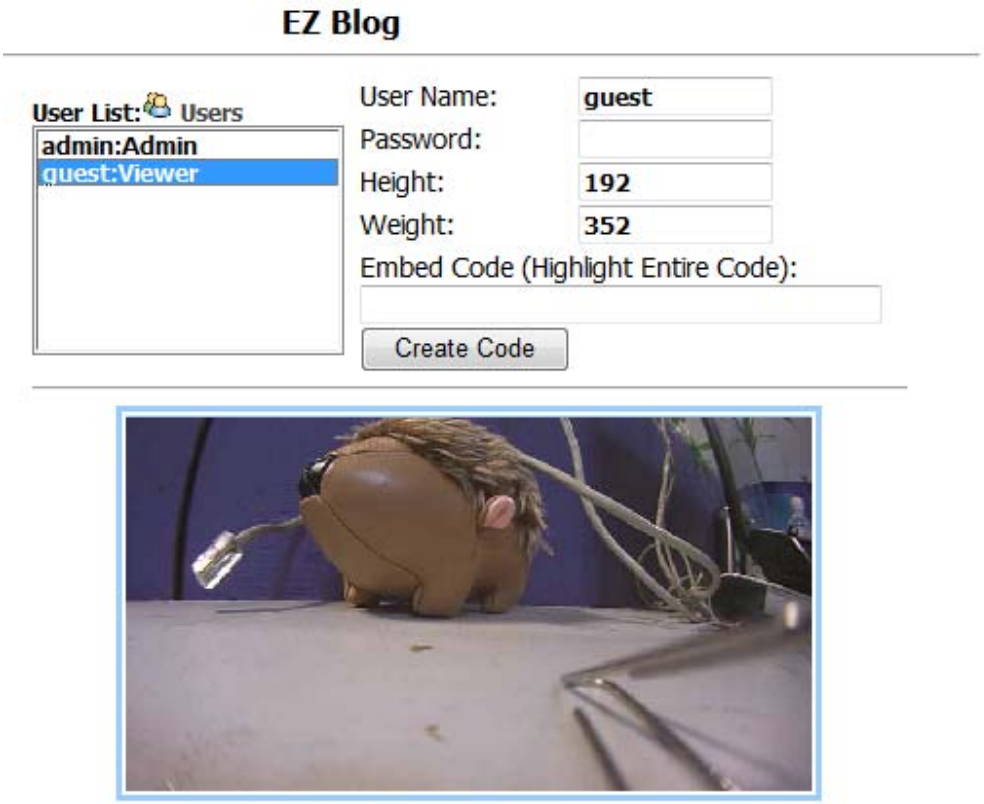


In the settings section, you can find the SMTP information by clicking on the SMTP tab.
Here you can see the current SMTP Server information and email address.

Storage Settings
You can also select the file format in which you would like the IP Kamera 9070-CSW to send.
Select from **MPEG4** or **MJPEG.**

EZ-Blog

EZ Blog allows you to easily integrate code into your blog which will let you directly stream into your blog, website, and any compatible site. This way you can IP Kamera as more than a regular security camera but also a promotional tool.

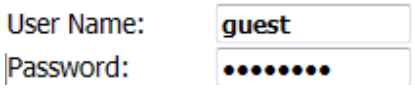


User List: This shows the Users Available to create an Ez Blog link with. Use a guest user account to create the EZ-Blog. You can easily create on by clicking on the User link

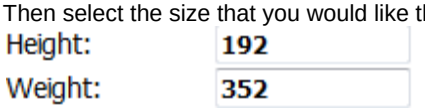
Setup the Embed Code

Next step is to setup the Embed Code that will be implemented into your blog, website, etc.

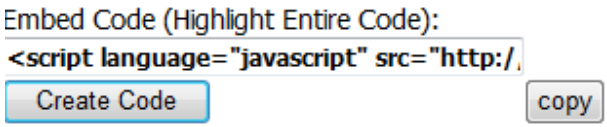
1.) type in the correct password for your login account.



2.) Then select the size that you would like the embedded video to be.

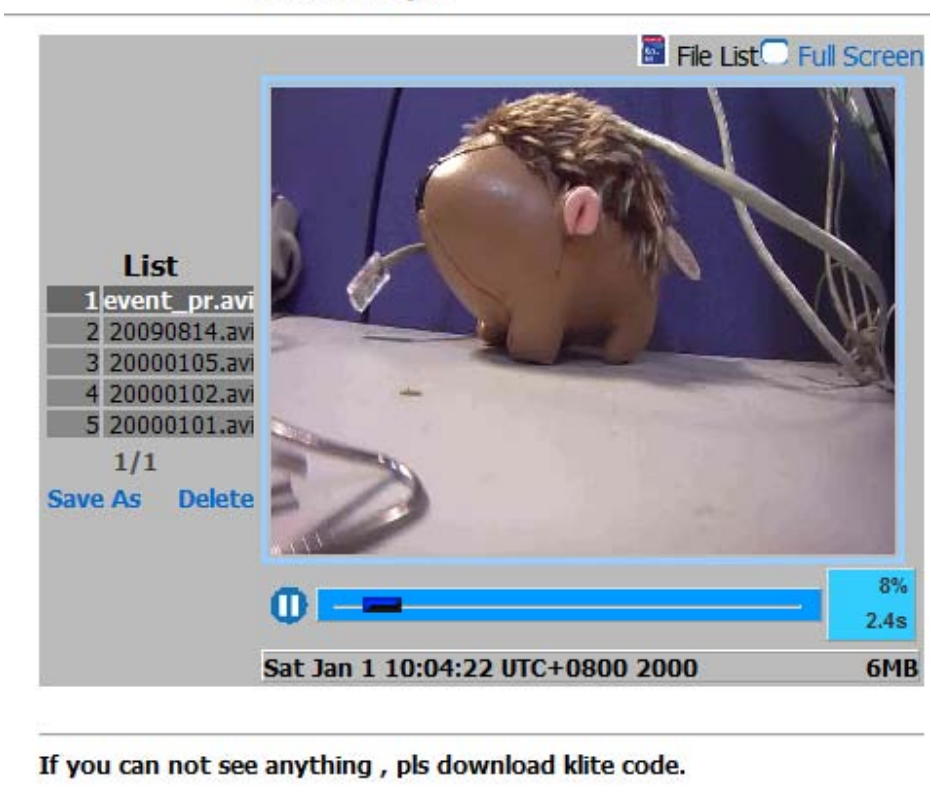


3.) Click on the create code button.



4.) You can highlight the embed code from inside the box and then copying (ctrl + C) or you can just hit the copy button to copy the code.
5.) Once the code has been copied, place that code somewhere in the body of your blog or website and a video will be displayed on the screen.

Media Player

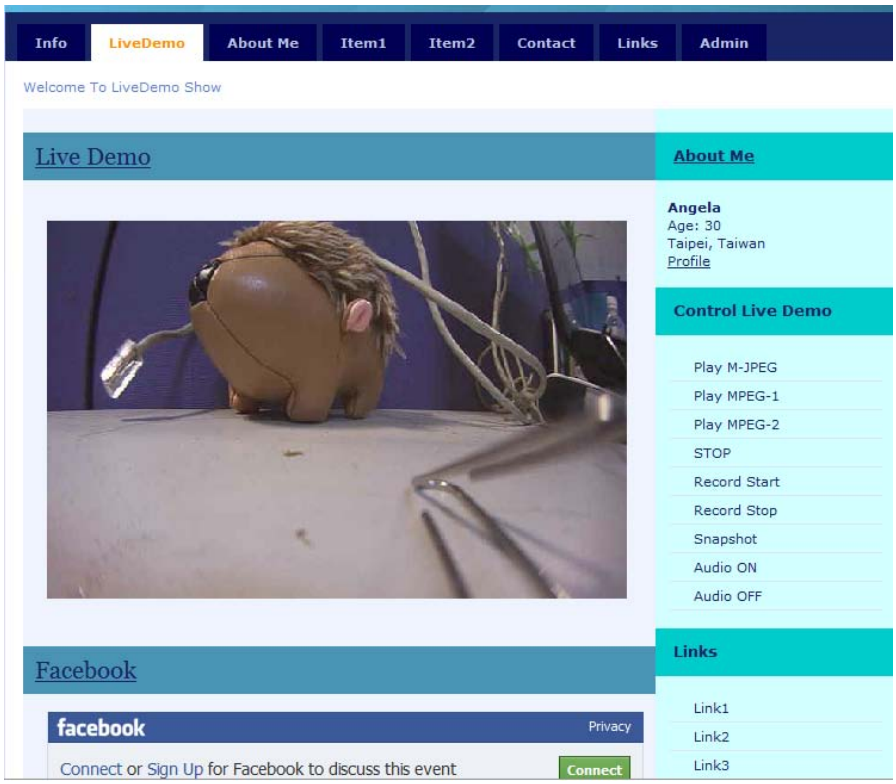


The media player allows you to view your recordings on the SD card directly through the internet without requiring downloading the file first. This feature makes it very convenient for live streaming.

View in Full Screen

To view the IP Kamera in full screen model you will need to press the Full Screen mode.

My Web



The My-Web functionality will make your IP Kamera more than just a surveillance tool. Now you can use it to promote your company, restaurant, business, school, and etc. With some basic website skills or tools any can make a My Web site.

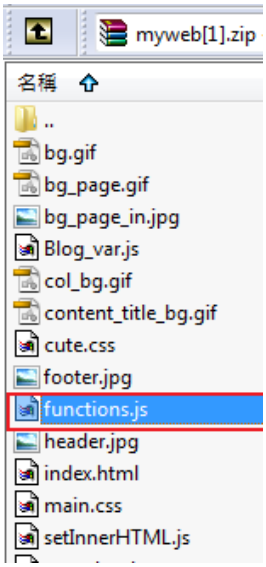
Turning On My Web

Enable my web button:
The enable My Web button will activate the My Web functionality. Once enabled every time the device is accessed it will be set to the My Web Page.
Login Required:
The login required will require your My Web users to login to the device before being able to use it. This is a way to keep unwanted viewers from entering the My Web

Setting up My Web

To setup My Web you can download the MyWeb file from the 9070.

1.) Click on the Download Default Page.
2.) Save the Zip file to a location where you can edit it
3.) Extract the file functions.js



4.) Start creating a My Web and be sure to include the functions.js into your code. (Note: Do not include folders within the webpage.
5.) After you have created the webpage, make sure to create a Zip file. Zip up the file and

Returning to default My Web page

If you would like to return your 9070 to the default My Web page click the default My Web Page button. This will reset the current My Web to the original manufacturer default.

Using My Web

To use the My Web feature:

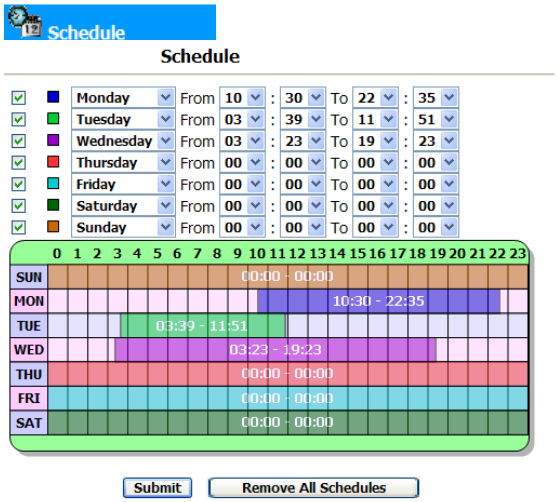
1.) Use IPEdit and directly log into the IP camera.
2.) The device will open the root page of the 9070 to the My Web page.

3.) If you would like to return to the normal administrator page for the 9070 you can login to the admin site.
For Example:

9070 IP Address: 192.168.12.111 **Port**:8080
Then on the web browser type in the following
http://192.168.12.111:8080/index.htm

Schedule Record

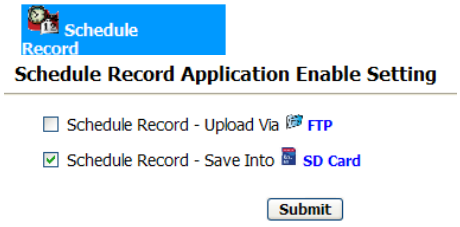
Schedule


Schedule
Schedule
Monday From 10 : 30 To 22 : 35
Tuesday From 03 : 39 To 11 : 51
Wednesday From 03 : 23 To 19 : 23
Thursday From 00 : 00 To 00 : 00
Friday From 00 : 00 To 00 : 00
Saturday From 00 : 00 To 00 : 00
Sunday From 00 : 00 To 00 : 00
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
SUN 00:00 - 00:00
MON 10:30 - 22:35
TUE 03:39 - 11:51
WED 03:23 - 19:23
THU 00:00 - 00:00
FRI 00:00 - 00:00
SAT 00:00 - 00:00
Submit
Remove All Schedules

The schedule allows you to select days and times that you would like to schedule automatic recording. You can pick a day from (Sunday – Saturday) and also a option for Everyday.
To schedule automatic recording:

1.) Select the day that you would want to start recording.
2.) Select the **From time** and the **To time**.
3.) Once the schedule has been created hit the submit button to apply the new settings.

Schedule Record

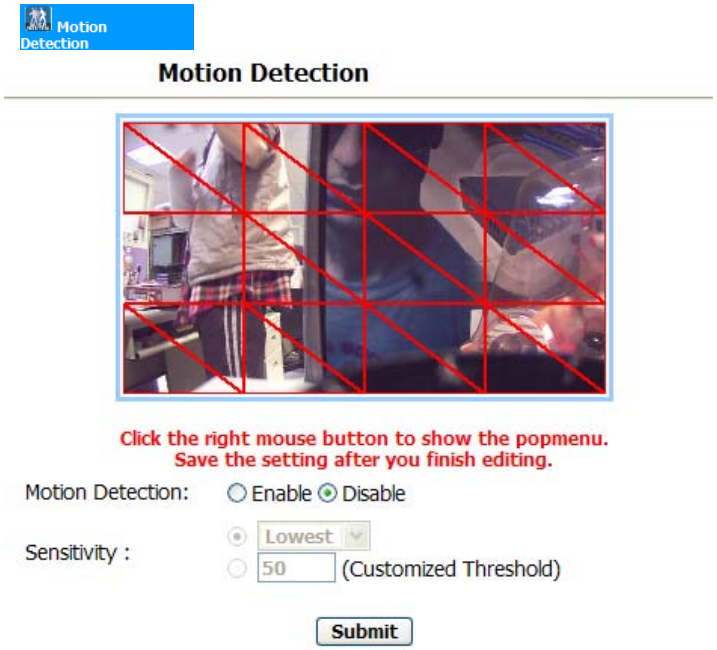

Schedule Record
Schedule Record Application Enable Setting
Schedule Record - Upload Via FTP
Schedule Record - Save Into SD Card
Submit

Schedule Record allows you to select where the schedule will record the video files to.

Schedule Record – Upload Via FTP: Saves schedule recordings into FTP
Schedule Record – Save into SD Card: Saves schedule recordings into SD Card

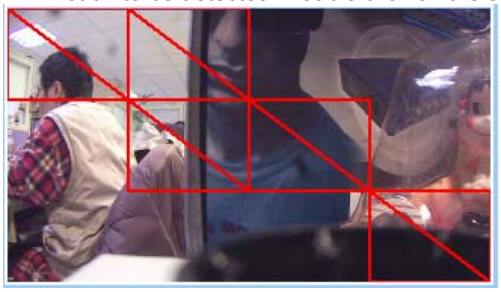
Alarm

Motion Detection



To enable motion detection:

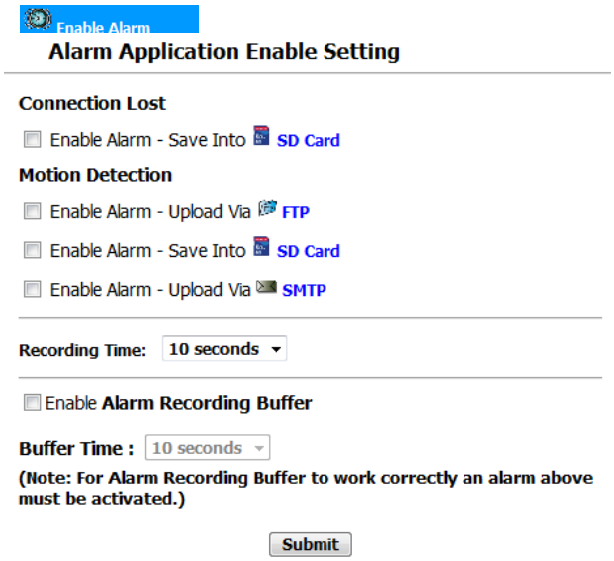
1.) Select Enable in the motion detection option.
2.) Select the sensitivity of your choice
    a. You can pick from Lowest, Low, Medium, High, Highest
    b. You can also customize your own threshold from (1-99)
3.) Once you have set your settings on the window screen click on the picture where you want the motion to be detected. Double click on the selected areas to remove the choice.



You can right click on the window screen for more options

4.) Once your settings have been set hit the submit button to save all changes.

Enable Alarm


Enable Alarm
Alarm Application Enable Setting
Connection Lost
Enable Alarm - Save Into SD Card
Motion Detection
Enable Alarm - Upload Via FTP
Enable Alarm - Save Into SD Card
Enable Alarm - Upload Via SMTP
Recording Time: 10 seconds
Enable Alarm Recording Buffer
Buffer Time : 10 seconds
(Note: For Alarm Recording Buffer to work correctly an alarm above must be activated.)
Submit

Enable Alarm – Lost Ethernet Connection: Save into SD Card:
When Ethernet connection is lost the device will automatically save into the SD card. Saving a backup.

Enable Alarm - Upload FTP
When motion is detected, the IP Kamera 9070 will upload the video file to the selected FTP server.

Enable Alarm - Save Into SD Card
When motion is detected, the IP Kamera 9070 will upload the video file to the SD card.

Enable Alarm – Save SMTP
When motion is detected, the IP Kamera 9070 will send the video file to in a E-mail format.

Recording Time: Set the duration of time you would like the IP Kamera 9070-CSW to record when alarm is set off.

Enable Alarm Recording Buffer: The alarm recording buffer allows the camera to the selected amount of buffer time before an alarm has been detected. This allows the IP Kamera 9070-CSW to start recording before any incident has occurred..

Media Player

Logout

The Logout

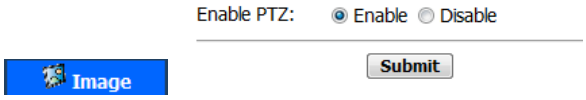
The media player allows you to view your recordings on the SD card directly through the internet without requiring downloading the file first. This feature makes it very convenient for live streaming.

View in Full Screen

To view the IP Kamera in full screen model you will need to press the Full Screen mode.

EPTZ-Set

The EPTZ allows you to Pan, Tilt, & Zoom the image that you are viewing.
To activate this feature EPTZ must be enabled in the Image section of the 9070-CSW.



Note: When EPTZ Controller is activated Video Codec mode will be switched to MPEG4 & M-Jpeg when disabled the codec will be set on Mpeg1, Mpeg2, & M-Jpeg.

How to use EPTZ with the mouse

On the Live view Video screen the EPTZ controls are:

Zoom In: Click and Hold the left mouse in the live view then release when zoomed to preferred point
Zoom into highest: Double click left mouse
Zoom out: Click and Hold the right mouse in the live view then release when zoomed to preferred point
Zoom out to screen fit: Double click right mouse

Note: When using the mouse to zoom in the snapshot function will not take a picture of the zoomed picture but the resolution size.

‘

7.) Controlling the Device

CGI HTTP Commands

Http commands allow you to control the device with commands. The basic commands are provided below.

There are two ways to input http commands with authorization required
Password in http:
http://login:password@ipaddress:port/command

Password not in http:
http://ipaddress:port/command

Note: If you use the password not in http: command you will need to enter it when the browser asks for the password.

Snapshot Command:

The snapshot command takes a snapshot of the camera in the current view.

http://ipaddress:port/snapshot.cgi

Ex. http command:
http://192.168.100.50:85/snapshot.cgi

Change Name:

This command allows you to change the name of the IP Kamera 9070-CSW

http://ipaddress:port/vb.htm?cameratitle=**name**

Ex. http command:
http://192.168.1.192/vb.htm?cameratitle=test_907011

Change IP Address:

This command allows you to change the IP Address of the IP Kamera 9070-CSW

http://ipaddress:port/vb.htm?internetip=**ipaddress**

Ex. http command:
http://192.168.1.192/vb.htm?internetip=192.168.1.191

Change Port:

This command allows you to change the Port of the IP Kamera 9070-CSW

http://ipaddress:port/vb.htm?httpport=**portnumber**

Ex. http command:
http://192.168.1.192/vb.htm?httpport=1025

Change Subnet Mask:

This command allows you to change the Subnet Mask of the IP Kamera 9070-CSW

http://ipaddress:port/vb.htm?subnetmask=**subnetmask**

Ex. http command
http://192.168.1.192/vb.htm?subnetmask=255.255.0.0

Note: Default subnet mask is 255.255.0.0

Change Gateway:

This command allows you to change the gateway the IP Kamera 9070-CSW.

http://ipaddress:port/vb.htm?gateway=gatewayaddress

Ex. http command
http://192.168.1.192/vb.htm?gateway=192.168.1.1

Change DNS:

This command allows you to change the gateway the IP Kamera 9070-CSW.

http://ipaddress:port/vb.htm?dnsip=dnsipaddress

Ex. http command
http://192.168.1.192/vb.htm?dnsip=168.95.1.1

MJPEG Streaming

This command allows you to integrate streaming data into a software, website, or any other application.

http://ipaddress:port/ipcam/mjpeg.cgi

Ex. http command
http://192.168.1.192/ipcam/mjpeg.cgi

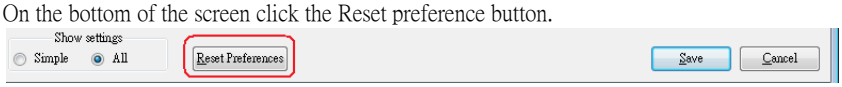
8.) Using RTSP with VLC

Before Setting up VLC: Make sure that the 9070-Lite is set to be the DMZ host on the router that you are using, please refer to the routers manual on how to accomplish this.

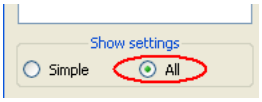
How to setup VLC media player & Open a network stream

Note: Before using RSTP you must port forward your router to the following port numbers.
For 1280 x 720P (Mpeg4-1): **Port forward to 554**
If Port forwarding (Mpeg4-2): **Port forward to 8554**

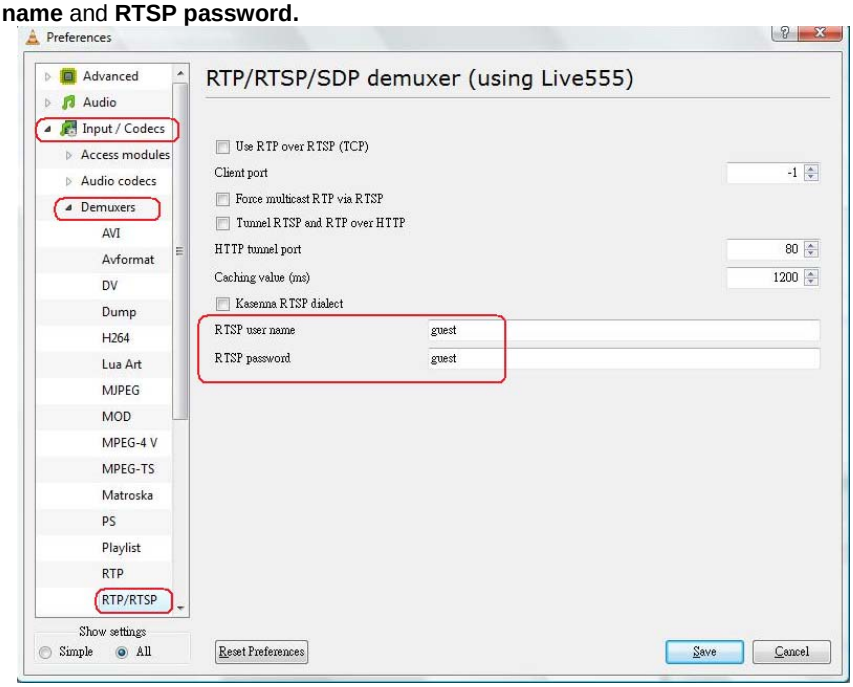
1.) Open VLC media Player
2.) Click on Tools > Preference
3.) On the bottom of the screen click the Reset preference button.



4.) On the bottom left hand side of VLC select the all under the show settings area.

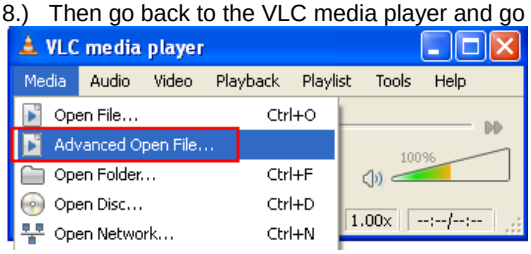


5.) Then in the left panel select Input / Codecs > Demuxers > RTP/RTSPl and type in the **RTSP user name** and **RTSP password.**

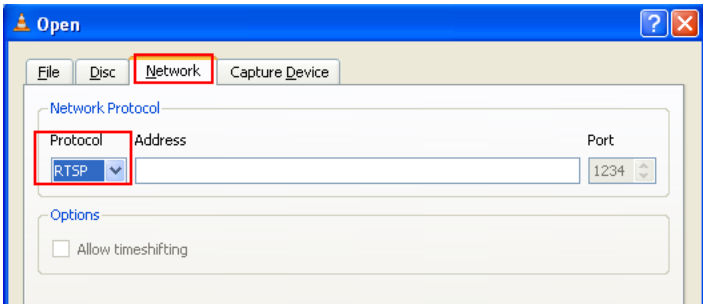


6.) Check the Cache value. *For low latency, it should be 70~80 based on PC's performance.*
Note: If the video is not smooth, set the caching value from 150~1200. This problem could be due to too much congestion, busy pc, and etc.
7.) Save the new settings

8.) Then go back to the VLC media player and go to Media > Advance Open File



9.) Next select the network tab and under the protocol select RTSP.

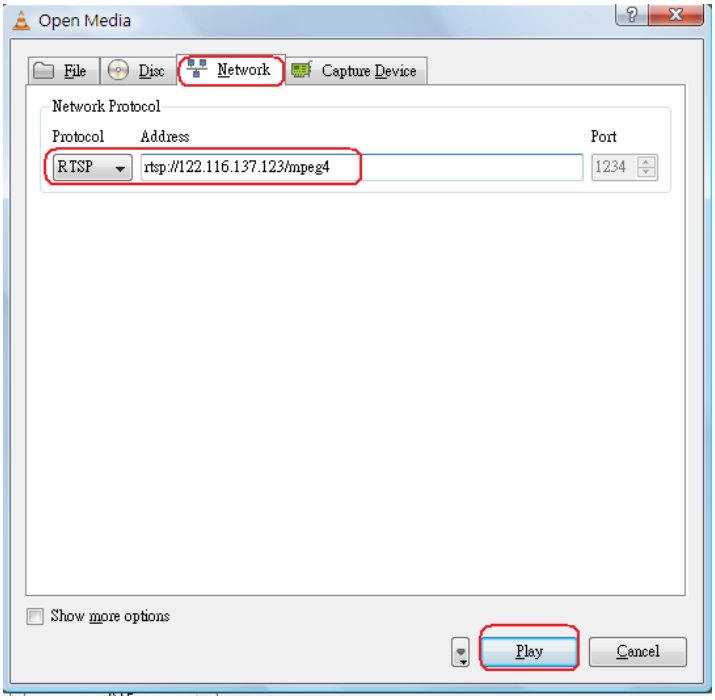


10.) Type in the RTSP address of your device

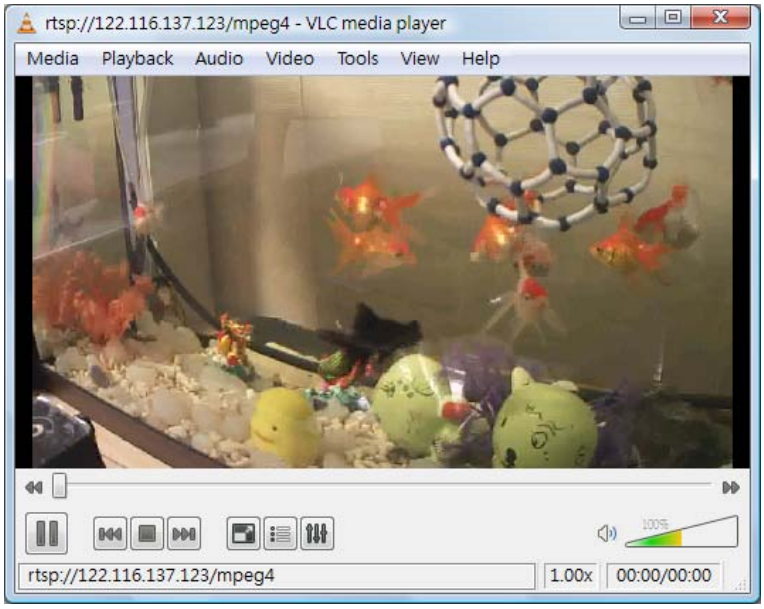
For Mpeg4 Stream1 : rtsp://<IP Address>/mpeg4

For Mpeg4 Stream2 : rtsp://<IP Address>:8554/mpeg4

Example: rtsp://122.116.137.123/mpeg4



Hit the play button and wait a few seconds for the program to start streaming.


rtsp://122.116.137.123/mpeg4 - VLC media player
Media
Playback
Audio
Video
Tools
View
Help
rtsp://122.116.137.123/mpeg4
1.00x
00:00/00:00

9.) Using CNT with Surf16 CH

CNT makes connecting to the IP Kamera 9070 a very simple task. Using Surf 16 CH and multi device DVR monitoring software, you can easily view your 9070CS.
Follow these simple steps:

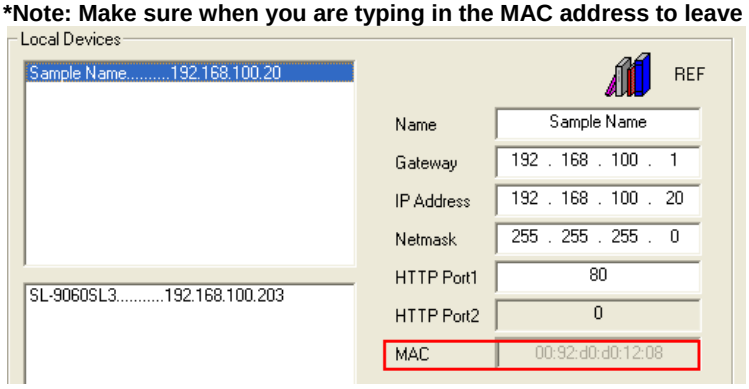
Finding the MAC Address

There are two ways to find the MAC address in IPEdit.
***Note: IP Server must be enabled on your device's webpage. By default IP Server is enabled.**

Find MAC Address in LAN Using IPEdit

1.) In IPEdit, highlight the device that you are using. On the right side of IPEdit you will find the MAC Address that you will need to use CNT.

***Note: Make sure when you are typing in the MAC address to leave out the ":"**

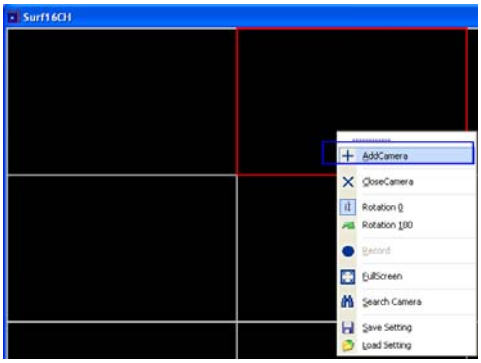


Find MAC Address in WAN Using IPService on IPEdit

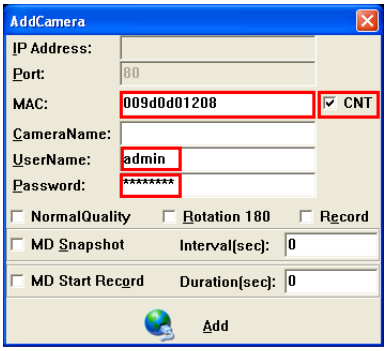
1.) To find your MAC Address through the internet, Open IPEdit and hit the connect button on IP Service.
2.) Then Type in the name of your device in this case it is "Sample Name", then hit the search button.
3.) Your device should be listed and the MAC address should be displayed on the screen. Copy down the MAC address and use it to connect via CNT.

Add device using CNT

1.) On Surf 16 Ch DVR software, right click on the screen on one of the windows and select Add Camera



2.) Then under the section labeled **MAC:** Type in the MAC address.



3.) Do not forget to enter the password and login.

10.) Frequently Asked Questions (F.A.Q)

Q1: Why can't I view the video files that I have recorded, nothing is playing?

Ans: VLC Codec, you can download VLC Codec from their website at:

Q2: How do I reset the device to manufacturers default values

Ans: On the back of the device there is a reset button, hold down the reset button for more than 7 seconds. Then give the 9070-CSW a 1 minute to restart. Once the device has restarted it will be set back to manufacturer default settings.

Default Values
Default IP: 192.168.1.168 (When 9070-CSW is connected to PC directly)
Default Login: Admin
Default Password: 12345678

Q3: Why does the device on EPTZ change my video mode?

Ans: When EPTZ is activated Video Codec mode will be switched to MPEG4 & M-Jpeg when disabled the codec will be set on Mpeg1, Mpeg2, & M-Jpeg.

Q4: How do I take snapshots using the EPTZ function?
Ans: When using EPTZ function remember that only the snapshot functions works with the EPTZ controller. If you are just using the mouse to Pan Tilt and Zoom into your picture you the snapshot button will not capture the screen correctly. A way you can take a picture of the screen using the EPTZ with the mouse is to click on the print screen button on your computer.

Q5: Why is the RTSP not connecting to my VLC player or Quick time Player?
Ans: To use the RTSP functionality it is necessary to first set your 9070-Lite to be the DMZ host in your network. Also be sure to port forward your device at the following ports.

Port 554 for 1280 x 720P
Port 8554 for CIF format

Please refer to the routers manual on how this is setup

Q6: How do I improve the image quality on this device?
Ans: The Image quality of the 9070 is dependent on the bit rate of the device. With a larger bit rate the device will naturally create higher quality image, but this will affect the smoothness of the streaming when accessed through the internet. To find the most optimal settings for image quality and streaming smoothness, try different bit rate settings to achieve the best fit settings. .